This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

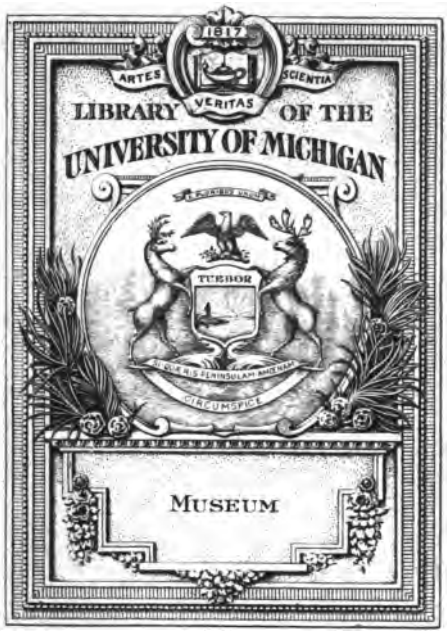
+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

A 692,097 DUPL


1817
ARTES
VERITAS
SCIENTIA
LIBRARY OF THE
UNIVERSITY OF MICHIGAN
TUEBOR
CIRCUMSPICE
MUSEUM

Museum

F
1060.
.S62

NARRATIVE

OF

THE DISCOVERIES

ON

THE NORTH COAST OF AMERICA;

EFFECTED BY THE

OFFICERS OF THE HUDSON'S BAY COMPANY

DURING THE YEARS 1836-39.

BY THOMAS SIMPSON, ESQ.

LONDON:
RICHARD BENTLEY, NEW BURLINGTON STREET.
Publisher in Ordinary to Her Majesty.
1843.

LONDON:
Printed by S. & J. BENTLEY, WILSON, and FLEY,
Bangor House, Shoe Lane.

Museum Lit.
5-8-33

CONTENTS.

PAGE

Memoir of Thomas Simpson, A. M. . . . vii

CHAPTER I.

Introduction. — Instructions. — The Colony of Red River. — Converted Indians. — Reconciliation of Hostile Tribes. 1

CHAPTER II.

Description of a Winter Journey from Red River to Athabasca. 26

CHAPTER III.

Occurrences at Fort Chipewyan, spring 1837. — Traits of the Natives. 67

CHAPTER IV.

Descent from Athabasca to the Polar Sea. . 82

CHAPTER V.

PAGE

Voyage from Mackenzie River to Franklin's Return Reef. — Adventures among Esquimaux and Ice. — Discovery of the Franklin Mountains. . . . 109

CHAPTER VI.

Discoveries on the Coast from Return Reef up to Boat Extreme. 128

CHAPTER VII.

Journey on foot, and in an Esquimaux canoe, to Point Barrow.—Conduct of the Natives. 143

CHAPTER VIII.

Return of the Expedition from Boat Extreme to the Mackenzie.—Ascent of that river.—Boisterous passage of Great Bear Lake.—Arrival at Winter-quarters. . 169

CHAPTER IX.

Transactions at Fort Confidence, winter 1837-8.—Death of Peter Taylor. — Winter Discoveries and Surveys. 200

CHAPTER X.

Ascent of Dease River.—Passage of the Dismal Lakes on the Ice.—Dangerous Descent of the Coppermine.—Flight of the Esquimaux. 245

CHAPTER XI.

PAGE

Second Sea Voyage. — Difficulties and detentions amongst Ice. — Long circuit in Bathurst's Inlet.—Discovery of Copper on Barry Islands. — Boats finally arrested near Point Turnagain. 270

CHAPTER XII.

Journey on foot and important discoveries to the Eastward.—Return to the Coppermine, and skilful ascent of that river. — Traverse of the Barren Grounds, and arrival at Fort Confidence. 291

CHAPTER XIII.

Transactions at Fort Confidence, winter 1838-39.—Murder and Distress among the Indians.—Relief afforded them. 314

CHAPTER XIV.

Second Descent of the Coppermine.—Interviews with Esquimaux.—Passage of Coronation Gulph, and arrival on new ground. 342

CHAPTER XV.

Stupendous bay, broken into minor bays, and bordered by countless islands. — Discovery of the Strait of Boothia.—Back's Point Ogle doubled in a fog.—Deposit found on Montreal Island. — Cape Britannia, and discoveries to the Eastward.—Progress arrested by gales.—Return. — Nearest approach to Ross's Pillar and the Magnetic Pole. — Southern shores of Boothia and Victoria Land explored. —Passage of a magnificent Strait.—Winter sets in.—Re-entry of the Coppermine River. . 359

CHAPTER XVI.

PAGE

Wintry return to Fort Confidence.—Passage of Great Bear Lake, and ascent of the Mackenzie. — Arrival at Fort Simpson, and journey on the Snow from thence to Red River. 389

APPENDIX.

List of the Plants collected during the Arctic Journey of Messrs. Simpson and Dease. By Sir W. J. Hooker, K. H. 409

Table of the Magnetic Variation and Dip observed by Mr. Simpson. 419

MEMOIR

OF

THOMAS SIMPSON, A.M.

BY HIS BROTHER, ALEX$^{R.}$ SIMPSON.

THOMAS SIMPSON, the writer of the narrative contained in the following pages, was born on the 2nd of July 1808, at Dingwall in Ross-shire, N. B. His father, Mr. Alexander Simpson, though a native of Aberdeenshire, had resided for many years in that distant Highland county, had long exercised the functions of magistrate of his little burgh, and was well known to its visitors and inhabitants for his hospitality and singleness of heart. He died in the year 1821, leaving his widow and two sons but very slenderly provided for.

Thomas, the eldest of the sons, was from his childhood distinguished by a quiet, tractable tem-

per, and a steady attention to his studies; and, as is the case with most boys in his sphere of life in Scotland who manifest such dispositions, it was early determined to educate him with a view to his becoming a clergyman of the Scotch Church.

In his boyhood he was rather of a weakly constitution, having at one time shewn a strong tendency to consumption. He was then considered by his companions as being of a timid disposition; and, so far from taking a lead in the games common among boys, he was remarked for an unwillingness to join in their rougher sports, and for a hesitation in entering upon any exercises that could in the least expose him to personal danger.

In these respects we find a remarkable similitude to the early years of another traveller of much repute — Abyssinian Bruce; and, indeed, in every matter belonging to their early lives, and some belonging to their after career, there is much resemblance between these explorers of two very different portions of the globe. Both were mild and timid in their boyhood: both daring and impetuous in their after-life: both, from an early age, excited much interest and sanguine expectations of future success in everyone connected with them: both profited in-

dustriously by their opportunities of education: in both an inclination early shewed itself for the sacred office of the ministry: both were energetic; and their energies were directed enthusiastically to the discoveries in which they were engaged: and both were alike regardless of hunger, thirst, fatigue, and danger in the prosecution of these discoveries.

In pursuance of the design of educating him for the Church of Scotland, Mr. Simpson was sent in his seventeenth year to King's College, Aberdeen. Here he pursued his studies for four winters: the remaining months of each year he spent in his native town, preparing himself for the succeeding winter's labours; or with his friends in the neighbourhood, to all of whom his pleasing address made him an acceptable visitor.

The distinctions to be gained at this northern institution are not, I am well aware, of equal value with those to be won at the more celebrated colleges of southern Scotland, or at the Universities of England; yet the attainment of the highest of them is, at least, a proof of a young man's pre-eminence among his fellow-students. At the end of his four years' *curriculum* Mr. Simpson carried off the "Huttonian" prize,—the highest given at King's College,—on an examina-

tion of comparative merit in all the departments of study during the *curriculum;* and at the same time received a degree as Master of Arts.

In the winter of 1828-29, Mr. Simpson attended the divinity class of the same college. He had, while thus engaged, a repetition of an offer — which had been pressed upon him in 1826, and declined—to join Mr. (now Sir George) Simpson, the Governor of the Hudson's Bay Company's territories in America.

The change which had been gradually going on for several years in his temperament and constitution was now complete: from a delicate, timid boy, he had sprung up a strong, brawny youth, with the sanguine disposition generally accompanying a state of high bodily health.

On a review of his position and prospects, he saw that, to obtain a settlement as a parochial clergyman of the Church of Scotland, he might require to wait for many years, during which he must support himself by the usual resource of probationers of that Church—public or private tuition. His active and energetic mind, which, as a clergyman, would have found an adequate sphere in a zealous discharge of his functions, could but ill brook the irksome and monotonous labour of tuition; he had high

expectations of meeting with much of adventure and interest in the distant and savage region to which he was invited: he therefore resolved to accept this reiterated offer, and proceeded to America early in 1829.

Of the years spent by him in the Hudson's Bay country previous to the commencement of the Arctic expedition, it is unnecessary to say much. His sanguine temperament and buoyant spirits enabled him to pass through them without much weariness or *ennui;* and he strove, and with success, to accommodate himself to the duties and mode of life which were imposed upon him by a residence in the country which he had chosen as his sphere of action.

Of the share Mr. Simpson had in planning and organizing the expedition of which the following pages are a narrative, he himself speaks modestly and briefly in the first chapter of that narrative. Although Mr. Simpson's name appears only as second or junior officer of the expedition, —the senior being Mr. Peter Warren Dease, an old and experienced officer of the Hudson's Bay Company, who co-operated with Sir John Franklin on his last expedition,—yet a glance at the narrative in the following pages will prove that Mr. Simpson was really the main-spring of the expedition. He alone was at all conversant

with science: and the most arduous parts of the service performed by the expedition—the completion of the survey between Mackenzie River and Point Barrow; the exploration of the country between Great Slave Lake and the Coppermine River — essential to the transport across that rugged and sterile country (well called the *Barren grounds*) of the boats and provisions of the expedition; and the pedestrian journey along the coast, of the summer of 1838, which opened the prospect of a clear sea to the eastward, securing the success of the expedition in summer 1839, —were performed by him alone.

The narrative contained in the following pages is so full, yet so concise, that I consider it unnecessary here to give any details in reference to the expedition and its results. I shall merely remark, that every object in view when it was first organized was attained, with the loss of only one man, who died from sickness, not from accident or fatigue.

On the return of the party to Great Slave Lake in Sept. 1839, Mr. Simpson drew up a succinct narrative, in a letter addressed to the Directors of the Hudson's Bay Company, of the operations of the season, which had been so brilliantly successful; which letter was published in most of the leading papers of the civilized world — as

were likewise his similar letters, describing the operations of the two preceding years—and attracted much attention.

At the same time that this letter was forwarded to London, Mr. Simpson transmitted to the Directors a plan for an expedition to complete the survey of the coast between the extreme east of the discoveries of 1839, and the straits of the Fury and Hecla; and, notwithstanding the excessive fatigues to which he had been exposed for upwards of three years, he offered to assume the command of the expedition without a moment's respite, and anticipated that arrangements would be made by which he could again reach the Arctic coast in the summer of 1840.

With this expectation, and in order to be personally on the spot to expedite and superintend the arrangements, he left Fort Confidence, his dreary residence for two long winters, on the 26th Sept. 1839; and after a journey of most extraordinary celerity, having traversed 1910 miles on foot in sixty-one days, including all stoppages, arrived at Red River Settlement on 2nd Feb. 1840.

At this place he remained, anxiously waiting for letters from England, which would authorize his proceeding on his new expedition, and which would convey to him intelligence of the recep-

tion given in England to the news of his having completed the survey of the Arctic coast of America between the point reached by Beechey from the Pacific, and that to which Ross had penetrated from the Atlantic Ocean.

In both these expectations he was most deeply disappointed; for the annual canoes from Canada, which arrived early in June, brought him no ratification of his plan, nor news of the reception given by the public to the intelligence of the success of the expedition: indeed, his letters (contrary to his expectation) did not reach England in time to be acknowledged by that opportunity.

Having no authority for fitting out another expedition, the local authorities of the Company declined undertaking the responsibility of doing so, notwithstanding the very limited and economical scale on which it was proposed by Mr. Simpson; and he, deeply mortified at this delay of his plans, determined upon proceeding to England, in preference to remaining a year in idleness waiting for the acceptance of his proposal.

That acceptance was written on the 3rd of June, 1840, by the Directors of the Hudson's Bay Company, to their Superintendent at Red River, in the following terms:

"Reverting to the subject of the Arctic Discovery Expedition, the gallantry and excellent management manifested by Messrs. Dease and Simpson in that arduous and interesting service, and the good conduct of the people under their command, entitle them to our warmest commendations. The valuable and important services of Messrs. Dease and Simpson have been brought under the consideration of her Majesty's Government, who have not, as yet, noticed the subject.

"We observe that Mr. Dease avails himself of the leave of absence that has been afforded him with the intention of visiting Canada this season; and that Mr. Simpson volunteers to conduct another expedition, with the view of continuing the survey from the mouth of the Great Fish River to the Straits of the Fury and Hecla. We have much satisfaction in availing ourselves of that gentleman's proffered services: you will therefore be pleased to meet any demands that may be made by Mr. Simpson for men, goods, provisions, craft, &c. &c., and to take the necessary measures to give effect throughout the country to that gentleman's views and wishes in reference to the important and arduous service on which he is about to re-enter."

Had this letter, instead of being written on

the 3rd of June, reached Mr. Simpson on that date, how different might have been the result!

On the 6th of June Mr. Simpson left Red River Settlement, with the purpose of crossing the prairies to St. Peter's on the Mississippi, and thence making his way to England.

On starting from the Colony, he was accompanied by a party of settlers and half-breeds. Eager to reach England, he got tired, in a very few days, of their slow movements, and went on ahead in company with a party of four men. He pursued his journey with much rapidity; for, on a chart which was found with his other papers after his death, we trace his day's journey on the 11th of June to have been forty-seven miles in a straight line.

Subsequent to that date every circumstance is involved in mystery. All that can be ascertained with certainty is, that, on the afternoon of the 13th or 14th of June, Mr. Simpson shot two of his companions; that the other two mounted their horses and rejoined the larger party, a part of which went to the encampment where Mr. Simpson was alone, on the next morning; and that Mr. Simpson's death then took place.

Whether he shot these men in self-defence,

and was subsequently put to death by their companions; or whether the severe stretch to which his faculties had been subjected for several years brought on a temporary hallucination of mind, under the influence of which the melancholy tragedy took place, is known only to God, and to the surviving actors in that tragedy.

But it must be noticed, in support of the former supposition, that the depositions of those who pretend to describe the manner of his death are contradictory in the extreme. Moreover, the North American half-breed is, of all races in the world, that which most retains the *odium in longum jaciens*. Mr. Simpson had, five years before, incurred the animosity of the half-breeds of Red River by inflicting a chastisement on one of them who had grossly insulted him, and they then threatened his life.

Three of his companions were of this race. They saw Mr. Simpson returning to England after having achieved an object important in itself, but of which they even exaggerated the importance; their long-treasured animosity was likely to have shewn itself in threats and insults, if not in actual attack; and hence—it is the opinion of many intelligent men who have examined the circumstances, and are acquainted with the cha-

racter of the half-caste natives — resulted the events which cut short the career of this enterprising young traveller.

If the other supposition should be true (and there is nothing save the contradictory statements of his attendants to support it); if, indeed, it pleased Providence to darken the spirit which had passed undaunted through so many trials; we can but acknowledge that the decrees of God are inscrutable to mortals, and join in these beautiful lines of Cowper:

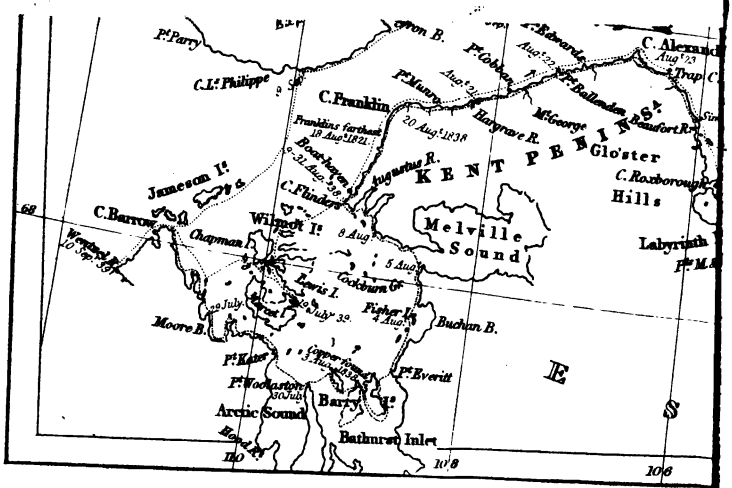
> Man is a harp whose chords elude the sight,
> Each yielding harmony disposed aright:
> The chords reversed (a task which, if He please,
> God in a moment executes with ease,)
> Ten thousand thousand strings at once go loose;
> Lost, till He tune them, all their power and use.

Thus perished, before he had completed his thirty-second year, Thomas Simpson, a man of great ardour, resolution, and perseverance; one who had already achieved a great object, and who has left a name which will be classed by posterity with that of Cook, Parry, Lander, and Franklin.

The British Government, in the same month in which he died, intimated its intention of bestowing upon him a pension of £100 per annum

in testimony of his services. The Royal Geographical Society presented to him in 1839 their gold medal, which never reached him, and is now in the possession of his only surviving brother.

In person Mr. Simpson was rather under the middle size; but he was strongly and symmetrically formed, and his whole appearance was that of a man able to encounter a great amount of physical fatigue. His countenance was open, and had an expression of energy and liveliness. His manners were pleasing and amiable. He was much beloved by all who knew him; and his loss has been deplored by his relatives—to whom his kindness and affection were unbounded—as the greatest of earthly calamities.


Pt Parry
C.L.t Philippe
C.Franklin
Franklins farthest
18 Aug.t 1821
Boothia Pen.a
Augustus R.
C.Flinders
Jameson I.t
C.Barrow
Wellington Ch.l
Chapman R.
Wilmot I.t
8 Aug.t
Melville Sound
KENT PENIN.A
Glo'ster
C.Roxborough
Hills
Labyrinth
Pt M.A
Lewis I.
Cockburn G.
Fisher I.
Moore B.
Buchan B.
Pt Kater
Pt Everitt
Arctic Sound
Barrow I.d
Bathurst Inlet
Bond B.
110
108
106
68

UNIV. OF MICH.

JOURNAL

OF

THE HONOURABLE

HUDSON'S BAY COMPANY'S EXPEDITION.

CHAPTER I.

Introduction.—Instructions.—The Colony of Red River.—Converted Indians.—Reconciliation of Hostile Tribes.

THE zealous and effective co-operation of the Hudson's Bay Company, in the Arctic land expeditions commanded by Franklin and Back, is well known to the British public. Notwithstanding the reiterated efforts of these able officers, and the simultaneous enterprise by sea, a considerable extent of the northern coast of America remained unexplored at their close.

Actuated by an earnest desire to complete an examination so important to geographical science, and towards the achievement of which Great Britain had made so many brilliant attempts, the Directors of the Company determined, in the spring

of 1836, to equip an expedition on a small scale, under the orders of their own officers. The facilities afforded by their extensive chain of posts, their control over the Indian tribes, the knowledge possessed by their officers of the resources, and their habitude to the hardships of the country, all concurred in pointing out this mode as the most likely to ensure success.

Chief Factor Peter Warren Dease, who so ably assisted Sir John Franklin at his winter quarters in 1825-26, and myself, were appointed by Governor Simpson to the joint management of the expedition; and I was honoured with the Governor's commands to draw out a plan of operations, upon which our instructions were to be founded. Among various plans considered, that which appeared the most eligible coincided in its leading features, but on a reduced scale, with one previously proposed by Dr. Richardson. The following copy of the instructions, which were soon after delivered to us by Governor Simpson, will convey to the reader a lucid and comprehensive view of the whole subject.

"Norway House, 2nd July, 1836.

"GENTLEMEN,

"BY the 79th and 80th Resolutions of Council of this season, you will observe that we

have determined on fitting out an Expedition forthwith, for the purpose of endeavouring to complete the discovery and survey of the Northern shores of this continent.

" 2. This object has, for a great length of time, excited the most lively interest in the public mind, and has baffled the exertions of many enterprising men, among whom the names of Parry, Franklin, Ross, and Back have of late years appeared conspicuous; but I trust that the honour of its accomplishment is reserved for the Hudson's Bay Company through your exertions; and, in selecting you for so important a mission, we give the best proof of the high opinion we entertain of your abilities and qualifications for such an undertaking.

" 3. The expedition, consisting of twelve men, is now placed under your direction; and you will be pleased to conduct it without delay to the Athabasca country, and to pass the ensuing winter at Fort Chipewyan, or Great Slave Lake, as you may consider expedient, although, in my opinion, Great Slave Lake would be the preferable wintering ground, in many respects, as regards the objects of the expedition.

" 4. At the opening of the navigation in June, you will proceed by boat down Mackenzie River to Fort Norman; and there leave four men,

with directions that they proceed from thence to the north-east end of Great Bear Lake, and there erect buildings, establish fisheries, and collect provisions, for the accommodation and maintenance of the party during the winter 1837-8.

"5. You will then go down to the sea with the remaining eight men, and endeavour to trace the coast to the westward to long. 156° 21′, N. lat. 71° 23′ 39″, whence Captain Beechey's barge returned. Should your progress along the coast be obstructed by ice or fog, as Sir John Franklin's was, you will either put the boat in a place of security, and proceed on foot with all your party, or leave four men with the boat for its protection while you go along shore, carrying a sufficient quantity of provisions with you for the journey. It is desirable to take observations as frequently, and to survey the coast as accurately as possible, without, however, losing time on your outward journey in waiting for the appearance of the sun, moon, or stars, which are frequently obscured by the dense fogs that prevail so much on that coast; but devoting as much time to these objects as the season and the state of your provisions will allow on your return.

"6. At the most westerly point you may reach, you will erect, in a conspicuous situation, a pillar

or mound, and leave deposited in the earth at its base a bottle hermetically sealed, containing an outline of the leading circumstances connected with the voyage.

"7. In suggesting that the boat should be left, in the event of your progress being obstructed by ice or fog, I beg it to be understood, that that ought not to be done if there be the least probability, that, by perseverance, you may succeed in getting her along shore, as the preservation of the boat I consider to be highly essential both to the accomplishment of the voyage and to the protection of the party; but if there be no possibility of getting on with the boat, I beg to recommend that you provide yourselves with axes and cordage to make rafts for crossing rivers, and some parchment sheeting and oilcloths, to make a couple of small canoes for the conveyance of the party, should it be found impossible to cross the rivers on rafts, and in order to secure your retreat in the event of the loss of the boat.

"8. Should you not be able to accomplish the voyage or journey during the season of open water, and that you fall in with friendly Esquimaux or Indians, as many of the party as can be maintained may remain with them, so as to complete the survey in the course of the

winter or spring; in this, however, you will exercise your own discretion, and be guided by circumstances.

"9. It is exceedingly desirable, however, that you should return by open water, so as to pass the winter at the establishment to be formed at the north-east end of Great Bear Lake, in order to make the necessary preparations for another voyage of discovery, to the eastward, at the opening of the navigation in the summer of 1838.

"10. The object of that voyage is to trace the coast, from Franklin's Point Turnagain, eastward, to the entrance of Back's Great Fish River. To that end, you will haul your boat across from the north-eastern extremity of Great Bear Lake to the Coppermine River before the winter breaks up, and at the opening of the navigation proceed to the sea, and make as accurate a survey of the coast as possible, touching at Point Turnagain, and proceeding to Back's Great Fish River, if the strait or passage exists, which that officer represents as separating the main land from Ross's Boothia Felix; but should it turn out, on examination, that no such strait exists, and that Captain Ross is correct in his statement that it is a peninsula, not an island, you will in that case leave your boat and cross the isthmus on

foot, taking with you materials for building two small canoes, by which you may follow the coast to Point Richardson, Point Maconochie, or some other given spot that can be ascertained as having been reached by Captain Back. And you will be regulated in determining whether you will return by Great Fish River or by the coast, by the period of the season at which you may arrive there, the state of the navigation, and other circumstances.

"11. In order to guard against privation, in the event of your returning by Great Fish River, it will be advisable to make arrangements, at Great Slave Lake, that a supply of provisions, with ammunition and fishing-tackle, likewise babiche for snow-shoe lacing, be deposited at Lake Beechey, or some other point of that route.

"12. Should you be unable to complete the voyage to the eastward from the Coppermine River in one season, you may, as suggested in reference to the other voyage, take up your quarters with the Esquimaux for the winter, so as to accomplish it the following season.

"13. In making your arrangements for both voyages, I have to recommend that a considerable quantity of pemican and flour, not less than one hundred pieces, be provided for voyaging

provisions, and that you be well supplied with materials for constructing small canoes, leather for shoes, and snow-shoe netting, likewise with ammunition, axes, crooked knives, fishing-hooks, net-thread, backing and setting lines, and with warm clothing for yourselves and the people.

" 14. The necessary astronomical and surveying instruments* are provided, to enable you to take observations and to make surveys, in which you will be as accurate as possible; and you will be pleased to prepare a full and particular journal, or narrative of the voyage, likewise a chart of the coast; and to take formal possession of the country, on behalf of Great Britain, in your own names, acting for the Honourable Hudson's Bay Company, at every part of the coast you may touch; giving names to the different headlands, mountains, rivers, and other remarkable objects you may discover. It is also desirable that you make a collection of minerals, plants, or any specimens of natural history you may fall in with, that appear to be new, curious, or interesting.

" 15. You are hereby authorised to avail yourselves, for the use of the expedition, of any assistance whatsoever you may require, at any of the Honourable Company's establishments you

* By Jones, Charing Cross.

may touch at, or have communication with, either by letter or otherwise; and the gentlemen in charge of those establishments are hereby instructed to meet all demands you may make upon them.

"16. In the event of any accident occurring to prevent either of you from proceeding on this mission, the other will be pleased to follow up the object of it, and to avail himself of the assistance, as a second in command, of any clerk of the Company he may find within his reach; and such clerk will be pleased to act in that capacity accordingly. With fervent prayers for your safety and success,

"I remain, Gentlemen,
Your most obedient humble servant,
(Signed) GEORGE SIMPSON."

"Messrs. P. W. Dease and Thomas Simpson."

Our complement of men was completed at the same high rate of wages as on Captain Back's overland expedition. We were unfortunate only in our fishermen: one injured his leg and was unable to go; another, a powerful man, named Anderson, who had served at Fort Reliance, being seized with a sudden panic, fled into the woods, where he was found, after our departure, disordered in his mind. His place

was filled by a man subsequently engaged on the route northward.

A supply of trading goods having been got up from York Factory, and all the other arrangements being complete, Mr. Dease took his departure, on the 21st of July, from Norway House for Athabasca, in company with Chief Factor Smith, the gentleman in charge of that department, who afforded every possible aid in transporting the goods and provisions destined for the expedition, during the long and laborious voyage to Fort Chipewyan, which they safely reached on the 28th of September. At the same time I returned to spend the autumn at Red River Settlement, chiefly with a view to refresh and extend my astronomical practice, which had for some years been interrupted by avocations of a very different nature.

It would be foreign to my purpose to enter into a lengthened description of this isolated colony: I shall merely bestow upon it a cursory glance, to give the reader some faint idea of its peculiar character. Situated under the 50th degree of north latitude, and 97th of west longitude, at an elevation of eight or nine hundred feet above the sea, and stretching for upwards of fifty miles along the wooded borders of the Red and Assiniboine rivers, which flow through a level

country of vast extent, it possesses a salubrious climate and a fertile soil; but summer frosts, generated by undrained marshes, sometimes blast the hopes of the husbandman, and the extremes of abundance and want are experienced by an improvident people. Horses, horned cattle, hogs, and poultry, are exceedingly numerous. Sheep have been brought by the Company, at great expense, from England and the United States, and are reared with success. Wheat, barley, oats, potatoes, turnips, and most of the ordinary culinary vegetables, thrive well. Pumpkins, melons, and cucumbers come to maturity in the open air in favourable seasons. Maize, pease, and beans, have not been extensively cultivated; hops grow luxuriantly; flax and hemp are poor and stunted; orchards are as yet unknown.

The banks of the rivers are cultivated to the width of from a quarter to half a mile. All the back level country remains in its original state—a vast natural pasture, covered for the greater part of the year with cattle, and also furnishing the inhabitants with a sufficiency of coarse hay for the support of their herds during the winter. The length of this severe season exceeds five months, the rivers usually freezing in November and opening in April, when there is a fine sturgeon-fishery; but Lake Wini-

peg, the grand receptacle of the river waters, does not break up till the close of May.* The most common sorts of wood are oak, elm, poplar, and maple; pines are likewise found towards Lake Winipeg. Firewood is rafted down the rivers, from above the limits of the colony, during the summer, or transported on sledges when the snow falls; but as this essential article is now, through waste and neglect, growing less plentiful, many of the inhabitants have provided themselves with cast-iron stoves, which occasion a much less consumption of fuel. The two principal churches, Protestant and Roman Catholic, the gaol, the Company's chief buildings, the bishop's residence, and the houses of some retired officers of the fur trade, are built of stone, which is brought from a considerable distance. The generality of the settlers dwell in frame or log-houses, roofed with wooden slabs, bark, or shingles, and, for the most part, whitewashed or painted externally. Not a man, however mean or idle, but possesses a horse; and they vie in gay carioles, harness, saddles, and fine clothes. A great abundance of English goods is imported,

* Two-decked vessels ply on this lake during the summer between the colony and the entrepôt of Norway House, situated at its northern extremity, where the river navigation to Hudson's Bay commences.

both by the Company and by individuals, in the Company's annual ships to York Factory, and disposed of in the colony at moderate prices. Labour is dear, and produce of all kinds sells at a higher rate than could be expected in such a secluded place.

Governor Simpson has long endeavoured, by arguments and rewards, to excite an exportation to England of hides, tallow, flax, hemp, and wool for the benefit of the settlers, but with little success. The bulky nature of such exports, a long and dangerous navigation to Hudson's Bay, but, above all, the roving and indolent habits of the half-breed race, who form the mass of the population, and love the chase of the buffalo better than the drudgery of agriculture or regular industry, seem to preclude the probability of this colony rising to commercial importance.* The currency of the place consists in the Company's notes, with a smaller amount of

* Since this was written, I have learned with infinite pleasure, that the settlers have at length found out the only practicable outlet for their cattle and grain; the fine level plains leading to the Mississippi and the St. Peter's, where there is the promise of a sufficient market among the Americans. Domestic manufactures too, which ought ever to precede exportation, have at last made some progress, in the shape of coarse cloths, stuffs, shawls, linen, sacking, tanned leather, &c.; all which tend to diminish the annual orders from England, and to render the people independent.

silver and copper coin. Fifteen wind and three water mills grind the wheat and prepare the malt of the inhabitants, who use neither barley nor oats in bread. Of all these mills two only have been erected by a Roman Catholic, a gentleman in the Company's pay as warden of the plains; the rest are in the hands of the Protestants, who constitute but two-fifths of the population. It may be remarked that, while not a few of the children, by native women, of the Company's retired European servants, who are chiefly Orkneymen, inherit the plodding careful disposition of their fathers, the half-breed descendants of the French Canadians are, with rare exceptions, characterised by the paternal levity and extravagance, superadded to the uncontrollable passions of the Indian blood. Many of the industrious Scotch, who first planted the colony in 1811, under the auspices of the late Earl of Selkirk, have saved handsome sums of money, besides rearing large families in rustic plenty. A considerable portion of this valuable class, however, dreading the predominance and violence of the half-breeds, with whom they have avoided intermarrying, have converted their property into money, and removed to the United States.

Besides extensive purchases of grain and pro-

visions, for their transport and other service, the Company annually expends large sums at Red River, in various works of public utility, such as experimental farming, erecting churches and other buildings, endowing schools, affording medical aid gratis to the poor, encouraging domestic manufactures, maintaining an armed police, dispensing justice, and in contributing to the support of two Protestant clergymen, of a Roman Catholic bishop, and three priests from Canada. These self-denying men are exemplary in their lives, zealous and indefatigable in their benevolent labours, among the fruits of which may be reckoned the conversion and location of a great number of Indians, of the Cree and Saulteaux or Chipeway nations. To compensate this heavy outlay the Company has hitherto derived no return, for the occasional sale of lands does not even defray the cost of the survey, they being in most instances bestowed gratis, though regularly purchased from the Indians, and the fur trade of the surrounding country has been long ago ruined by the colony; but under the Company's fostering care a population of five thousand souls has been nurtured, and a comfortable retreat has been provided for such of its retired officers and servants as prefer spending the evening of life, with their native families, in

this oasis of the desert, to returning to the countries of their nativity. I cannot pass over without particular notice the admirable boarding-schools established by the Rev. Mr. Jones, where about sixty youth of both sexes, the intelligent and interesting offspring of the Company's officers, are trained up in European accomplishments, and in the strictest principles of religion. Nor should I omit mentioning the Indian settlements, founded by the Rev. Mr. Cockran at the lower extremity of the colony. He has provided schoolmasters for the native children, and built places of worship where he regularly officiates. He has constructed a windmill for the Indians, assists them in erecting their wooden houses, and with his own hands sets them the example of industry. At the other extremity of the colony, M. Belcour, one of the Roman Catholic priests, with untiring zeal conducts a location of Saulteaux Indians on a smaller scale. I wish I could add that the improvement of the aborigines is commensurate to those beneficent cares. But unhappily the experience of Canada, of the United States, of California, in short, of all parts of North America where the experiment of ameliorating the character of the Indian tribes by civilization has been tried, is renewed at Red River. Nothing can overcome their in-

satiable desire for intoxicating liquors; and though they are here excluded from the use of spirits, and the settlers are fined when detected in supplying them with ale, yet, from the great extent of the colony, they too often contrive to gratify that debasing inclination, to which they are ready to sacrifice everything they possess. They feel no gratitude to their benefactors, or spiritual teachers; and, while they lose the haughty independence of savage life, they acquire at once all the bad qualities of the white man, but are slow, indeed, in imitating his industry and his virtues.*

Indian lads, educated in the Church Missionary Society's school at Red River, have been sent to instruct their countrymen in various parts of the Company's territory. In the countries of the Columbia and New Caledonia, to the westward of the great Rocky mountain chain, the missionary labours promise considerable success. There the climate is softened by the influences of the Pacific; food is abundant; the numerous natives do not lead the same solitary wandering lives as

* Yet among the native tribes there exist marked distinctions. The swampy Crees, who have long been employed in the Company's service at York Factory and other places, adopt steady habits with far greater facility than the proud Saulteaux, who contemptuously term the settlers gardeners and diggers of the ground.

the eastern tribes, but dwell together in villages. They are endowed with a greater capacity and quickness of apprehension; are more pliant and tractable in temper; are fond of imitating the customs of white men; and now receive, with eagerness, the truths of Christianity, from those upon whom but a few years ago they perpetrated the most barbarous murders: but the fever and ague, to which the country is very subject, has of late thinned their numbers. The Company's principal chaplain resides at their depôt of Fort Vancouver, on the north side of the Columbia river, where agriculture, rearing of stock, and other commercial operations are prosecuted on a great scale. The same enlightened body has, of late years, liberally assisted American missionaries employed in instructing the dissolute maritime tribes, and in founding an American colony on the Willamette, a southern tributary of the Columbia; and has since conveyed across the mountains several Canadian priests, who, under the authority of the bishop at Red River, are gone to form another British settlement on the shores of Puget's Sound,—the nucleus of a future empire in the far west. The case is widely different in the frozen regions of the north; there the Indian hunters are scattered through interminable forests, into

which civilization can never penetrate. Since the coalition of the rival companies, however, and the discharge of the noxious swarm of adventurers, who, encouraged by the licence of a hot opposition, overran and well-nigh ruined the country, the precepts of morality and order have been instilled into the minds of the aborigines by many officers of the Company. No stronger proof of the salutary effect of their injunctions can be adduced than that, while peace and decorum mark the general conduct of the northern tribes, bloodshed, rapine, and unbridled lust are the characteristics of the fierce hordes of Assiniboines, Piegans, Black-feet, Circees, Fall and Blood Indians, who inhabit the plains between the Saskatchewan and Missouri, and are without the pale of the Company's influence and authority.

It gives me sincere pleasure to say that a reconciliation has at length been effected between those lately inveterate and bloody enemies, the Saulteaux and Sioux nations. Under the safeguard of the Company's people, aided by the settlers, two bands of the latter tribe visited Red River during my residence there, in 1834 and 1836. Presents were given and speeches were made both to them and to the assembled Saulteaux, who upon the first occasion vere very

violent, and were only restrained from bloodshed by disarming and other vigorous measures; but, upon the last occasion, they smoked the calumet of peace and slept in the same apartments with the Sioux at the Company's head-quarters, Fort Garry. The Sioux seemed highly gratified with the kindness and protection they experienced, and have on several occasions performed friendly offices to the Company's couriers and others passing through their country to the American garrison on the river St. Peter's. They are a warlike, equestrian race, with light sinewy frames and eagle eyes, who pursue the buffalo in the boundless plains of the Missouri and the upper Mississippi.

Some of the incidents connected with the first visit of the Sioux may be worth narrating, as illustrative of savage passions. A party of six-and-thirty men, headed by a daring chief, called The Burning Earth, in consequence of some disgust which originated across the lines, resolved to brave the danger arising from the implacable hatred of the Saulteaux, through whose country they must pass, and to pay a visit to the British settlement. Being obliged to leave their horses on the way, they marched during the night, and reached undiscovered the woody banks of the Red River, a short distance above the remotest

houses. There they lay concealed for several days, and, being almost naked, suffered much from cold and hunger. At length one of them, venturing out to the brink of the stream, observed on the opposite side a half-breed, named Baptiste Parisien, whom he recognised. This man had travelled through the Sioux territories, and served, it is said, in the United States' cavalry against the Socs and Foxes. Parisien instantly invited the stranger to his house; and the latter, plunging into the river, swam across to him. He told his story, and Parisien generously proceeded with a canoe to ferry over the whole party. He lodged them, collected his friends to protect them from their enemies, and sent a messenger to the Company's central establishment, at the forks of the Red and Assiniboine rivers, to report their arrival and desire of an interview. Chief Factor Christie, the governor of the colony, acceded to their request, and Parisien conducted them, under a strong escort, to Fort Garry. There a conference was opened with great form and gravity. The Sioux declared that the object of their hazardous journey was to transfer their trade to the British, and, to that end, to make a lasting peace with the Saulteaux. Mr. Christie replied, that, they being American subjects, the Company could not

gratify them in the first particular, but was most anxious to promote a cordial reconciliation between them and their ancient enemies. I was particularly pleased with the speech of a grim old warrior, called The Black Eagle. After describing their state of perpetual hostility with the Saulteaux: "In our plains," said he, "every stock, every stone, is taken for an enemy; these fears can no longer be endured: let the Sioux and the Saulteaux smoke the calumet of peace; let them hunt the buffalo together, and let them henceforth be one nation." Another orator, of a more lively mien, concluded his harangue by begging "a drink of (rum) fire-water;" "for," said he, "I love it better than ever I did my mother's milk." As second officer, I assisted Mr. Christie during the interview, and officiated at the same time as French interpreter, that being the language of the only *capable* Sioux speaker at the place. At the close of the "palaver," The Burning Earth presented Mr. Christie and myself with ornamented pipes, and I handed him the gun I carried in return.* All went on

* His people then entertained us in the open air with their national dances, which are more animated than most Indian exhibitions of this sort. The *Corypheus*, a humorous little fellow, was really amusing. His place was on the outside of the ring, and, as he moved round the dancers, he saluted each with a smart lash of a thong on the bare back, and immedi-

pleasantly till the evening, when a large party of Saulteaux, from the river Assiniboine, galloped suddenly into the court. They were completely armed, and breathed fury and revenge; having lost forty of their relatives by an attack of the Sioux a year or two before. We instantly stationed a strong guard around the building, and despatched messengers, summoning the police and able-bodied settlers to the defence of the strangers who had thrown themselves on our hospitality. A sufficient number arrived in the course of the night to prevent any violent attempt being made. The Saulteaux, continually augmenting, were so irritated at being repulsed from the windows through which they sought to fire upon the unfortunate Sioux within, that they turned upon some of Parisien's followers, and blood had well-nigh been spilled. The great difficulty now was, how to get the strangers safely home again. We supplied them with provisions, tobacco, and some clothing, and also ammunition for their defence, in case of their being attacked beyond the bounds of the colony. They concealed their alarm, put on a resolute countenance, sung their death-song, and the chief, unsheathing his sabre, smote the bare shoulders

ately after sounded a shrill whistle with a look of malicious drollery.

of each of his followers with the flat side of the blade. After this ceremony, they declared their readiness to depart, and were led out between two lines of the police and the settlers to the boats, which were in readiness to convey them across the river. The Saulteaux, who were on the watch, now endeavoured to press forward; but we drove them back, and disarmed a great many of them. Parisien and his half-breeds undertook to conduct the Sioux safely out into the open plains, where they might set their bush-fighting foes at defiance. The party had no sooner crossed the river than a number of the Saulteaux threw themselves into their canoes on the Assiniboine, a little distance above, with a view to intercept their retreat. Observing this manœuvre, I ran towards them, followed by Mr. M'Kinlay and a few others, and, levelling our guns at the men in the canoes, ordered them to turn back. They angrily complied, when the principal man, seeing that we were but a handful, began to vent threats against us; but, a party opportunely riding up to our assistance, we carried the old fellow with us to the establishment, and his followers dispersed. Parisien sent us word next day, that, though some ambuscades were laid, he had seen the Sioux safely clear of the woods; after which they had little difficulty in

returning to their own country, about Lac Travers. I regret to add that this gallant fellow was, three years afterwards, shot through the heart in the mêlée of a buffalo hunt.

On the second occasion, the Sioux came in double numbers, better armed, and led by Ulāněta, the greatest chief of their whole nation. He was distinguished by a sort of coronet of eagle feathers and a necklace of grisly bears' claws, with the unromantic addition of a pair of green spectacles! He is a tall elderly man, with a mild, almost a benignant, expression of countenance; yet he is said to be one of the fiercest warriors in all the plains. He was obeyed with respect, and some of his people seemed expressly appointed to maintain order amongst the rest. The whole party wore painted buffalo robes. They were, as before, hospitably received, and dismissed with gifts, but under strict injunctions not to repeat their troublesome and perilous visits.

CHAPTER II.

Description of a Winter Journey from Red River to Athabasca.

In the afternoon of the 1st of December, the day I had fixed upon for quitting the colony on my long winter journey to Athabasca, I bade adieu to my kind and much esteemed friend, Chief Factor Christie, to the worthy clergymen, and the other gentlemen forming the little society of the place, all of whom breathed the warmest wishes for our welfare and success. The autumn had been long and beautiful, and the snow had not yet cast its white mantle upon the earth. I was therefore obliged to set out with horses and carts, which conveyed our baggage to the Manitobah Lake. My gay cariole and three sledges followed, light drawn by the dogs, and attended by three drivers — chosen men — who completed the little party bound for the distant north. I started from Fort Garry on horseback, escorted by three or four of the young gentlemen belonging to the establishment.

Our ride was enlivened by a spirited wolf-hunt, one of our ordinary pastimes in the plains which environ the colony, where the horses are trained to the pursuit of the buffalo and wolf, and to stand fire at full speed. At sunset we rejoined our little caravan, which encamped on a bushy knoll about two leagues from Fort Garry. After spending some hours with me, my young friends retraced their steps homewards, and left us to our night's repose.

The waning moon shone brilliantly when we awoke; and, taking an early breakfast, we all started on foot. The morning was cold, but exhilarating. The sun, rising in cloudless splendour, threw his horizontal rays across the wide plain, and, illuminating the hoar-frost upon the long dry grass, gave to the expanse around us the appearance of a silver-spangled sea. At noon we halted for a short time at a cluster of trees, in whose shade we obtained sufficient snow for our horses and dogs, in lieu of water, a luxury not to be found in these arid plains. The country traversed was studded with a few copses of poplar and dwarf oak; but a great part of it having been swept by the running fires, so frequent and terrible in the prairies, presented a blackened and dismal aspect. I noticed a number of small natural mounds, on which lay frag-

ments of limestone, the great basis of the plain region; and quantities of little shells were strewed about in every direction. After travelling twenty-seven miles, we took up our quarters at sunset in a grove on a slight eminence, which my guide dignified by the name of "Le Grand Côteau."

On the 3rd we passed Shoal Lake, a place where the half-breed settlers kill a great many wild fowl in the fall and spring; after which our course changed from north-west to west, winding through a country agreeably varied with woods and plains. The former abounded in white hares (*lepus Americanus*); and, as our equipage moved leisurely on, we enjoyed an excellent and profitable day's sport. In the afternoon we reached the borders of Manitobah Lake, and procured a night's lodging in the houses of some "freemen," of whom we found eleven families resident there. These people subsist chiefly by hunting and fishing; they possess a few horses and cattle, and, though separated from their fellow-men, seemed to live quite happily. I ascertained the latitude of this spot, by a meridian altitude of Jupiter, to be 50° 22′ 45″ N. I shall not fatigue the reader by always recording the result of my observations, which may appear more properly in an Appendix.

Suffice it to remark, that, throughout the journey northward, I took bearings with a pocket compass; and, at night, determined our situation by altitudes of the planets or fixed stars.

The Manitobah Lake had but recently assumed its icy covering, which, as far as the eye could distinguish, rose in huge masses, as if forbidding all farther progress. So formidable was its appearance that the people endeavoured to dissuade me from prosecuting that route; but I resolved to persevere, and, dismissing our wheeled vehicles, we soon had our baggage snugly stowed upon the sledges. The cariole intended for myself I appropriated to the carriage of my books, instruments, &c., and preferred performing the whole journey to Athabasca on foot. Two of the young freemen agreed to afford us the assistance of their dogs to the Company's nearest post; and, at each establishment on the route, I, in like manner, procured the aid of a couple of fresh men to accompany us to the next. Then began the flourishing of whips, the shouts of the drivers, and the howling of the refractory dogs—all blending together in one horrible outcry. For some distance we found the ice almost impracticable, but on doubling a point the broken rugged masses gave place to a smooth and glassy level. To walk on such a surface, with the moccassins or

soft leather shoes of the country, was next to impossible; we were, however, provided with iron crampets, which we strapped on in much the same manner as the Kamschatdales wear their "posluki," or ice-shoes. Thus secured from many an awkward fall, we advanced rapidly, but found it no easy matter to keep pace with our dogs, who, rejoicing in the ease with which they now dragged their burdens, scampered along at a great rate. The young ice, as yet but a few inches thick, crashed and rumbled like thunder under our tread. About noon a violent storm of snow-drift suddenly arose, and compelled us to seek shelter among the spreading oaks and elms that ornament the banks of this extensive lake.

On the 5th we travelled thirty-four miles, our course lying north-west, across a series of gently rounded bays fringed with rushes. The wind blew piercingly cold, so that when overheated we stopped to cut a hole for water; our clothes, gloves, and caps immediately became solid, and we were glad to run again to acquire fresh warmth.

We resumed our route on the 6th, at an early hour. When daylight appeared, the Dauphin Mountain rose before us, blue in the distance, forming a highly agreeable object in that

level country. Our route led chiefly through a little archipelago, which conducted us at noon to a small trading post, called Manitobah-house. There we were delighted to cast off, for the remainder of the day, our galling iron shoes—real instruments of torture, which, long before we had done with them, forced us with groans to acknowledge that our feet were, indeed, made of clay.

In soil and climate this place equals Red River; barley, wheat, and potatoes, yielding, in most seasons, excellent returns. The lake produces very fine white-fish (*coregonus albus*); on some of its tributary streams tolerable salt is obtained by the freemen from saline springs, and the wild hop grows in many places in great profusion, and of good quality. In the evening a warm couch was spread for me in the corner of a large room, round which, on wooden bedsteads, lay my host Richard, his wife, and half a dozen grown-up daughters!

At noon of the following day we passed through a narrow strait, that gives to the whole lake the name of Manitobah, or Evil Spirit, by which the Saulteaux Indians believe it to have been formerly haunted. According to their account, terrible sounds used to be heard here, and fearful sights seen; among others, huge

snakes with horns! and it was not till after the establishment of a trading post near the spot, by the Canadians, who, with their singing and noise, scared the demons away, that the natives ventured to pass by this place of dread.

On the 8th we advanced thirty-three miles, of which the passage of an extensive bay occupied twenty-eight. The ice in this bay was intersected by large and dangerous rents, into one of which, while running heedlessly before the dogs, I fell; but, luckily seizing an upright fragment on the brink, I extricated myself, at the mere expense of a wetting. During the succeeding night it blew furiously from the northward; and when we got up at daybreak, we shook from our blankets a quantity of snow, none of which, unfortunately, adhered to the slippery ice. Our route followed the south side of the lake, from point to point, and at three P. M. we reached Portage la Prairie, a slip of land two miles broad, separating the Manitobah from the Winipēgoos or Lesser Winipeg Lake.

The Winipēgoos is a more extensive body of water than its sister lake, and in summer is brackish; but our route only comprehended a portion of sixty miles, which we easily accomplished in two days. The Duck Mountain forms a very conspicuous object in the western quarter.

The grey mists of morning were curling up its rugged sides when it first broke gratefully on our sight. At its base issue several saline springs, where the freemen manufacture salt, for sale to the Company at Norway-house. The oak region terminates here; but the shores of the lake are tolerably well clothed with elm, poplar, and a few ash, birch, and pine trees. This is particularly the case with Red Deer Island, which is large, and affords shelter to many of the fleet and graceful animals from which it derives its name. As we approached it, on the 11th, we perceived a red fox sporting upon the beach. He stood for a while looking at us, till, the dogs getting scent of him, off they went, cariole, sledges, and all, in full chase, utterly regardless of their drivers' cries; but reynard was unencumbered, and soon plunged into the thickest of the wood, where the sledges became entangled, and the laughable pursuit ceased. Crossing an arm of Duck Bay, twenty miles broad, where the ice, having become fixed in a gale of wind, was piled up in high sharp ridges, we encamped in a wood of pines, the first we had yet met with. Their evergreen branches form the favourite bed of the winter voyager — a comfort we did not fail to enjoy. A river that empties itself into this bay, and bears the same name, is much resorted to by

the Saulteaux. Several of them visited us in the evening, with a supply of fresh fish, for which they were liberally paid; and a share of our supper, and our *news*, made the poor fellows quite happy.

12th.—We now left behind us, with pleasure, the tedious large lakes; and, after suspending our iron shoes to the trees, with the first faint streak of day (between six and seven o'clock) we struck out across land for Swan River. The path was very intricate, and in many places imperceptible to the keenest ordinary eyes; but one of my native companions knew it well, and set us right when at fault. As an instance of the almost instinctive knowledge which guides the Indian unerringly through the pathless forest, I may here mention that this track was first marked out by one who was an utter stranger to the country it traverses, and had merely been once at Swan Lake from a different quarter; yet, though somewhat winding in its course, in order to follow the best ground, I found its general direction uniformly the same. There was still so little snow on the ground, that, though our tiny vehicles needed a track no more than eighteen inches wide, the sharp twigs and fallen timber tore the luckless cariole to tatters. Our route lay through woods, small lakes, and swamps; the

former abounding with three different species of grouse—the spotted, ruffed, and prairie, or sharp-tailed, (*tetrao Canadensis, cupido? et phasianellus,*) which, as I walked a-head, afforded me plentiful sport. In the afternoon we fell upon the trail of a solitary Indian, who had passed the day before, and killed a lynx on our path. We likewise saw an old camp of the natives, and several graves rudely constructed with logs—simple, but affecting memorials of the "stoics of the wood, the men without a tear." The weather was soft and overcast; and, after travelling nine hours without intermission, we only made good about twenty-one miles. We put up on the borders of a narrow piece of water, called Long Lake, and partook of a sumptuous repast—the produce of my day's shooting.

Next day the track became, if possible, worse, and more difficult to trace, in consequence of the fast-falling snow. At noon we found ourselves on the banks of Swan Lake, across which a violent storm was sweeping. Fortunately, the wind was on our backs; and, immediately losing sight of land, we proceeded due west for Fir Bay, a distance of six miles. About the middle of this passage we came suddenly upon a space of weak ice, only an inch thick, and partially covered with water. It was an awkward pre-

dicament, for advance we must; we, therefore, laid ourselves upon the sledges, and, our weight thus pressing on an extended surface, our sagacious dogs carried us safely over the danger. From Fir Bay, two miles of a swampy portage conducted us to Swan River, close to the tents of some freemen, who subsist by hunting, fishing, and making salt and maple sugar. We encamped a few miles further, in a fine wood of elm. After the men had gone to rest, the dry grass on which they lay caught fire, and before they were aroused their blankets were in a blaze; but, fortunately, the sleepers escaped unscorched.

It snowed incessantly during the 14th, making it heavy travelling for both men and dogs. Our route now bent to the south-west, sometimes ascending the winding river for several miles, but more frequently leading direct through the bordering country. The latter consists of swampy meadows, alternating with woods of poplar fringed with willow, and a few straggling clumps of pine.

The industry of man may, in some future age, convert this wilderness into a habitable land, as the climate is good, and barley, potatoes, and other vegetable produce have been raised at several points along Swan River.

On the 15th we came again in view of the

Duck Mountain, now lying to the southward of us. We had, in fact, made a circuit round it, to avoid its rude and impassable heights. We soon after crossed an open streamlet, close to a bend of the river, from whose high bank we looked upon a noble prospect. From west to north lay outstretched the blue line of the Porcupine Hills, which are densely wooded to the very summit; while from east to south-west extended the more lofty elevation of the Duck Mountain, encircling a vast extent of flat country, pleasingly diversified with wood and plain, through which, far as the eye could reach, might be traced the river's wandering course.

On the following morning we crossed a branch of the Thunder Hills, two miles in breadth. These hills afforded us some amusement in running down their steep declivities, an exercise the more acceptable as the weather had become very cold. In the plain beyond them we saw several tracks of red-deer, and fell in with an Indian family bound on a hunting excursion. In the evening we crossed Swan River for the last time, and, availing ourselves of the moonlight, struck off through an uneven country, partially covered with underwood, for Fort Pelly, twelve miles distant. We reached it at 8 P.M., and the gates were soon thrown open by Mr. Setter, to

give us admittance and a hearty welcome. Our day's journey was thirty-seven miles, but being able to use snow-shoes for a part of it, materially lightened the fatigue.

Fort Pelly is a compact well-ordered little place, sheltered from the north by a range of woods, with the Assiniboine winding a short distance in front. The only Indians there, during our visit, were a Saulteaux family, who, having suffered from privation, were kindly received, housed, and fed till they could resume the chase with a prospect of success. My observations place the establishment in lat. 51° 45′ 20″ N., long. 102° 5′ W. Variation 17° E.

Sunday the 18th was made a day of rest and thankfulness. The sky was bright and cloudless, the thermometer standing at minus 25°.

On the 19th the temperature fell to — 44°; but, being amply supplied with all things necessary, we took our departure in the forenoon. Our path was an Indian horse-track, which now wound beneath, now ascended, a line of gently undulating eminences, while on our left lay the woods that border the tortuous course of the Assiniboine. In the evening we crossed that river where it turns to the north, and encamped in a small group of poplars. The night was intensely cold, and I literally *burned* my fingers

with the sextant, while taking the usual observations. I afterwards adopted the precaution of using very thin shamoy gloves, and have often taken observations at still lower temperatures without injury.

We resumed our march at 4 o'clock the following morning. The moon, now near the full, shone coldly bright, and, as she sunk towards the west, threw long shadows on the snow, causing every bush and tree to assume strange and startling shapes. After proceeding fourteen miles, we were glad to halt in a thicket, for breakfast, soon after sunrise. Having completed this cheering operation, we with better heart gave our faces to the cold, which a westerly wind rendered doubly piercing. A fine pointer, though defended from the searching cold by a warm cloth coat and shoes to match, lay down and refused to stir till I drove him before me with the whip. Our route led due west, leaving the Assiniboine far to the north; and traversing a hillocky country, tolerably wooded, and abounding in small lakes and swamps, we saw numerous tracks of lynxes and wolves in pursuit of hares; and found suspended on the trees, by the natives, several splendid antlers of the stag. Quitting the horse-track, we encamped at the foot of the Nut Hills.

We started next day at the same early hour, and, while in the act of moving out of our bivouac, a troop of prairie wolves came howling around it, as if impatient to seize on anything we might have left. The morning was intolerably cold; and it required our utmost exertions to keep the blood in circulation, and to preserve our faces from freezing. I afterwards ascertained, at Fort Chipewyan, that this was the coldest day of the whole winter there, the thermometer being at —46°. We encamped at the west end of Stony Lake, having travelled twenty-nine miles, through a country consisting of narrow plains, studded with clumps of poplar, and an abundance of underwood, interspersed with little lakes and swamps. A great part of it had been recently overrun by fire; and the only interesting feature it presented was a view, on the left, of the low range of the Beaver Hills, which we could distinguish to be thickly covered with timber. The buffalo frequents this quarter, and we passed several of its old beaten tracks.

On the 22d we made similar progress. In the forenoon we crossed Fishing Lake, six miles wide; then changing our course from west to west-north-west, we struck out into the immense prairies which stretch from thence to the Sas-

katchewan River. After travelling over the shaggy frozen grass, which bore some recent traces of red-deer, for a few miles, we fell upon a tract of country that the fire had bared to the very soil. The light snowy covering rested on the blackened plain, and our poor dogs once more went on with comparative ease. Far on our right appeared a line of low woods, shooting out from the Nut Hills in an immense curve, the extremity or horn of which we reached at our usual camping hour.

We were now at the commencement of a plain, twenty miles in breadth, which my guide required daylight to cross; we therefore breakfasted, and started at 7 o'clock. The wind blew strongly from the westward; and to face it, where there was not a shrub, or even a blade of grass, to break its force, with a temperature of at least — 40°, was a serious undertaking. Muffling up our faces with shawls, pieces of blanket, and leather, in such a manner as to leave only the eyes exposed, we braved the blast. Each eyelash was speedily bedizened with a heavy crop of icicles, and we were obliged, every now and then, to turn our backs to the wind, and thaw off these obstructions with our half-frozen fingers. Early in the afternoon we reached what are called the Cross Woods, where we were glad to make the

best lodging we could for the night, there being another wide prairie on the opposite side. Notwithstanding every precaution, two of the men were injured by the cold; one a half-breed from Fort Pelly, who afterwards, at Carlton, lamented his inability to dance in consequence of his frozen heels. Neither bird nor beast was seen during the day; the intense cold having driven all living things, but ourselves, to the shelter of the woods.

Next morning we made an early start, and crossed the plain, which is fourteen miles wide, before breakfast. A few willows were thinly scattered over its barren surface, and we had a view of the low range of the Touchwood Hills, extending from south to south-east. We could again discern the deeply-curved woods on our right; in fact, we were travelling from one distant point of them to another, as if traversing successive bays of the sea, to which these great plains, that on the left reach to the Rocky Mountains, may well be likened. "Lac aux Plumes," a very large salt lake, which derives its name from the multitude of wild fowl that moult there every summer, lies near this part of our route. We breakfasted in the Moose Woods, and I observed the lat. 52° 4′ 16″ N., variation 18° 40′ E. The cold continued to be dreadfully severe.

Crossing another prairie, about half the breadth of the last, we encamped in a cluster of small poplars, near "the two openings," or vistas, in the woods, as seen from the plain.

Christmas-day, Sunday, the 25th.—On shaking off our slumbers this glad morning, a troop of wolves were "baying the moon" as she rode in a cloudless sky. The country before us being intricate, we could not start till daylight; and, when we sallied forth on our day's march, the weather had moderated. About two miles from our resting-place we passed over a round hill, and stood a while on its summit to enjoy the boundless prospect. From west to south stretched a vast plain, separated from another, of which we had a bird's eye glimpse to the north-east, by the broad belt of woods which we had been skirting along; while, before us, in our line of march, lay outspread a seemingly endless tract of open underwood, varied by gently swelling eminences. For seven miles our route led west-north-west, through thickets and over hillocks; it then changed to west for fourteen miles, through a more open country, consisting of rising grounds, or "côteaus," with bare ridges, and sides clothed with dwarf poplar and brushwood; while here and there, in the hollows, we crossed large ponds, scarcely deserving, on this continent, the title of

lakes. They have no outlet; and, on cutting through the ice for water, we generally found it putrid: such, however, is its scarcity in that level country, that we were often fain to use it when most nauseous, taking the precaution of imbibing it through snow, which purifies it in some slight degree. We now turned west-south-west for eight miles, keeping along a broad and rather winding ridge, which appeared to furnish the buffalo with a regular road of ingress to the woods. Several tracks of moose-deer were also seen during the day. After sunset we took up our quarters in a small clump of poplars. The whole country having been ravaged by fire, we could not find dry grass, as usual, for our beds, and spread our Christmas couch on willow branches; rough indeed, but rendered smooth to us by health and exercise.

Next day we continued the same direction for twelve miles; and, though I remonstrated with our half-breed guide on his leading us too much to the southward, Pierre persisted in his own accurate knowledge of the route; till suddenly we emerged into the open plains, where an illimitable snow-covered waste alone met the view. We made for an eminence five miles distant, whence we gained a full view of the

extraordinary country in which we now found ourselves. What are here called plains, consist of a collection of barren hills and hollows, tossed together in a wild wave-like form, as if some ocean had been suddenly petrified while heaving its huge billows in a tumultuous swell. Sinclair, one of my men, informed me that he had from Fort Pelly traversed, in the summer season, a similar country, extending to the borders of the Missouri. From our elevation we could discern, due north, our eagerly looked-for mark, the Birch Hill, by which lay our lost route. Being thus re-assured, a smart walk of thirteen miles brought us to the external fringe of underwood, in which we halted at sunset. The loose snow made the walking this day irksome; but we had many a capital race, as the sledges shot down the steep hill-sides. It was rather dangerous footing on these declivities, garnished as they were with badger-holes, which, being concealed by the snow, repeatedly entrapped our legs, and capsized us, though we fortunately escaped without fractures. The country is completely intersected by buffalo-roads: we saw many skeletons and one or two recent tracks of these animals; but no living creature, except a fox that started from his burrow on the top of one of the bare hills,

and a pair of lean ravens, which attended us for the greater part of the day. A strong southerly wind blew during the night.

At daylight on the 27th we found that a strong thaw had taken place, which rendered the travelling execrable; our route was full of deviations, which my guide declared necessary to avoid a rough thickety country. The fact was, the man was again at fault; and I was on the point of taking the guidance out of his hands, to shape a straight course for Carlton, when I found him kneeling on a hillock, with what purpose I know not; but, on questioning him, he said he recognised a low hill before us. On reaching it, we found ourselves in the midst, as it were, of a grand amphitheatre, being on every side surrounded by superior woody ridges. A few miles further lies the "Lake of the Moose Deer;" after passing which we gained the top of a range of round hills, extending across our route, where we lodged in a little hollow at sunset. In the course of the day we saw several tracks of buffalo bulls, and shot some partridges.

With the dawn we were again in motion. A light fog overhung the earth, which the rising sun soon dissipated, lighting up its fragments, as they rolled away, with bright and changeful hues. Our route traversed patches of brushwood, prai-

ries abounding in small lakes, and two broad low ranges of hills, at the base of the last of which we encamped. Our course all day was west-north-west by the compass. Walking was laborious in the extreme, the snow being soft, the grass long, and the ground lumpy; so that, though we only advanced twenty-three miles, we were all tired enough in the evening.

29th.—The cloudy weather having prevented me from obtaining observations during the night, I was desirous of taking a meridional altitude of Arcturus in the morning twilight, which placed us in lat. 52° 40′ 36″ N.; then, starting a little before sunrise, we proceeded across the plain. The morning, for the depth of winter, was exceedingly beautiful; and we had not gone far when we espied, on the top of a little eminence before us, four red-deer, inhaling the fresh breeze. They stood gazing at us for some time; and two of the party were preparing to creep towards them through a bushy dingle, when the beautiful creatures took the alarm, and, darting down the declivity with the speed of light, gained the woods and disappeared. At noon we found ourselves on the lofty banks of the South Branch, or Bow River, which is here a quarter of a mile wide, and well wooded with poplar, aspen, and birch. Descending to the stream, we came upon an

open space, where the clear current rushed sparkling over its stony bed; and we quaffed an ample draught of the pure element, deliciously refreshing after the foul and smoky snow-water of the plains. Then, mounting the steep bank on the opposite side, we pushed our way, through thicket and swamp, to the White Hill, a bare elevation, commanding a view of the open plains to the westward, and, to the east, of a wooded hilly country, with the broad river wending its way majestically through it. We encamped at Duck Lake, which is three or four miles long.

Next morning, after breakfasting, and making our simple toilet, we set out for Carlton, situated on the south side of the Saskatchewan River. There we were greeted by Chief Factor Pruden with a frank and cordial welcome; and, at his pressing request, I consented to pass our New-Year holidays with him. There were no bands of the plain Indians in the neighbourhood, and none of the alarms consequent on their appearance. In the course of the preceding summer they had several times fired into the place, which is defended by high palisades, planted with wall-pieces. Provisions were unusually scarce, the great fires in autumn having driven the buffalo to a distance; but one of the Cree hunters was fortunate enough to kill a female

moose and her two fawns within a short distance of the establishment.

On the 2nd a dance was given in the hall, at which Mr. Pruden's fine family, with all the other inmates, young and old, attended, decked in their gayest attire; and gave full scope to the passion for dancing inherent in all the natives of the country. The following day was employed in making pemican for our journey, and in getting everything in readiness to resume it on the morrow. There is some ground in cultivation here, and Mr. Pruden was justly proud of the sleek hides of the cattle and horses in his stable.

4th.—Being now reinforced with fresh men and dogs, we set out at a rapid rate. After crossing the river, which is nearly half a mile broad, we entered an open country, consisting of low, round, grassy hills, interspersed with clumps of poplar, and occasionally of pines, and with many small lakes; a range of hills, called "La Montagne Forte," appearing far on our left. We travelled on till dusk, when we encamped in a valley.

We started next morning at 4 o'clock. It was exceedingly dark, but we luckily fell upon a path made by some people who had lately passed towards Green Lake. The snow increased in quantity as we advanced, and the country be-

came more close and woody. After a walk of fifteen miles, we reached Shell River, a little stream; where we found, near an old Cree camp, several skins of the throat of the moose-deer suspended on poles, which are esteemed by the natives as charms of great efficacy in their conjuring. Sixteen or seventeen miles beyond this rivulet, we passed by Salt Lake, which is narrow, but of considerable length: its waters are unfit for use. A hill on its east side is clothed with fine birch, and thither the Carlton people resort to procure materials for constructing their sledges. Proceeding seven miles farther, we came upon a streamlet containing fine water, ironically named by the voyageurs "La Grande Rivière," on the banks of which, amongst pines, we halted for the night.

We started on the 6th at the same hour. The weather continued mild for the season, and cloudy, as if it would snow. After proceeding a distance of eight miles, chiefly occupied by four pieces of water, the largest of which is denominated Fishing Lake, we entered the boundary of the pine forest, in lat. 53° 30′ N. Two leagues of a very rough, uneven path brought us to another rivulet, open in several places, and very serpentine in its course, often expanding into small lakes, and originating in one, at the dis-

tance of ten or eleven miles. It traverses a pretty valley, the land rising gradually on either side. Three or four miles through thick woods lead thence to Otter Lake, five miles long, but not exceeding a quarter of a mile in breadth. We saw on the snow several marks of the valuable fur-animal from which it takes its name. Beyond this we crossed six little lakes, when, finding a fine camping-place, we halted after sunset, having travelled thirty-seven miles. One of the men had a narrow escape, his gun going off while carelessly fastened upon the sledge behind which he was walking.

Next morning we crossed six more "lakelets," separated from each other by very close woods, in passing through which the extreme darkness rendered it necessary to advance in a stooping posture, cautiously guarding our eyes from the low hanging branches: the space thus occupied was five miles. Then followed a hilly tract of fourteen miles in extent, dividing the waters which flow towards the Saskatchewan and Churchill rivers; about the middle of which we fell upon a streamlet winding through a valley, with elevated woody sides. Along this valley we descended, occasionally crossing the brook, which the recent mild weather had caused to overflow in many places, to our no small incon-

venience. At length, between 10 and 11 A. M., we reached Green Lake, where we stopped to breakfast, with enviable appetites. This lake is narrow, and its reaches assume various bearings, like those of a large river; its length is about seventeen miles. Finding the ice level, and not much encumbered with snow, we trotted briskly over it, and reached the little post at its extremity about sunset. Here we found some Crees, who, having been unsuccessful in hunting, were living for a time on the produce of the abundant fishery made by the people of the place at the commencement of the winter season.

A considerable quantity of snow fell during the night, and the morning of the 8th was very boisterous. At 5 A. M. we started, and, following a few turns of the stream by which Green Lake discharges itself into Beaver River, we turned off into a very bad, swampy track, leading to the two Duck Lakes, each half a league long, and nearly as far asunder. A short portage brought us to the banks of Beaver River, which is about the same size as Swan River, and similarly wooded. Descending it for twelve miles, we came to some rapids, which never freeze. Close to the open water we saw three otters, but they plunged into the stream before

we could approach within shot. We had now resumed our snow-shoes, but the fresh fall made the march very fatiguing both for men and dogs; and at 4 P.M. the violence of the gale obliged us to encamp.

We were again on the river the following morning at 4 o'clock; the weather desperately cold, with a violent north-west wind. We breakfasted at the foot of the "Turned-boat Hill," so called from its peculiar shape. The general thickness of the ice was about eighteen inches; but there were several open rapids, where the current ran with considerable force, pursuing a very irregular course, and rendering the ice extremely rough and difficult of passage. But upon the whole we made good progress, and early in the afternoon reached the point where we quitted the river, which describes a long circuit to the right before falling into Lac la Crosse, five miles to the east of the establishment. Perch River, a small stream, joins Beaver River two reaches lower down, and erroneously appears in some maps as "Riv. Lac la Ronge." This lake is fed by the Montreal River, which issues from Lac Assiniboine, a large body of water, extending, it is said, to within a day's journey of Green Lake, and abounding in fine white-fish. We tra-

versed part of the Long Lake Chain, and encamped in a grove of splendid pines, having travelled forty miles.

The morning of the 10th was clear, but piercingly cold. We were under way at 3 o'clock, and passed the remainder of Long Lakes. We then struck due north by the pole-star, and after travelling fourteen miles, including five more small lakes, we reached Lac la Crosse at daylight, and breakfasted. The lake here comes almost to a point, and expands very gradually for sixteen miles; when, having attained the breadth of half a league, this long arm unites to the main body, which is eight miles across to the establishment. There being but little snow on the ice, we ran all the way, and early in the afternoon we were most kindly and hospitably received by Chief Factor Mackenzie.

It was my intention to await at this place the arrival of an express, soon expected from Athabasca, in case there should be any arrangements to make respecting the additional supply of goods and provisions required by the expedition. The weather continued mild, with some heavy falls of snow. The "Fort" is neat and compact, the surrounding country low and swampy. The fishery, in the lake close at hand, yields a constant supply of fresh and wholesome food, summer and

winter; the little farm is productive, and the few domestic cattle maintained were in excellent condition. I noticed a number of ravens stalking about quite familiarly among the people and the dogs, and almost making their way into the houses. They are considered useful, during the heats of summer, in cleansing the beach of fish refuse, and are therefore treated with nearly as much consideration as the stork was by the ancients, and is at this day in Holland.

On the 13th I sent back my Carlton auxiliaries, after all hands had been gratified by a "ball," at which one of my companions, who was a capital fiddler, officiated as chief musician. A party of Chipewyans came in with an assortment of furs. They had been living in abundance on moose-deer, and were clothed in the same manner as the people of the establishment. The Chipewyans are the most provident of all the northern tribes; and, since the union of the rival companies in 1821, their numbers are decidedly on the increase. The longitude of the place, deduced from three sets of lunar distances, with stars on either side of the moon, was 107° 54′ 30″ W., differing only six seconds from that found by Sir John Franklin in 1825.

On the 20th the long-looked for couriers arrived, with letters from Mr. Dease, communi-

cating the welfare of the expedition. After writing on its affairs to the gentlemen in charge of York Factory, Norway House, and Red River, and being most liberally supplied, by my worthy friend Mr. Mackenzie, with everything requisite for the journey, we took our departure the same night.

At our usual breakfast hour, on the 21st, we reached Clear Lake, a tolerable day's walk on snow-shoes. Our route thence to Athabasca being precisely that followed by Sir John Franklin, scarcely needs the minute description which I have given of the preceding portion. Adhering to the general line of the summer water communication, the road was not so readily mistaken as heretofore; and we were able to make a great part of our way during the night, which all experienced snow-travellers know to be less wearisome to the spirits than broad day, when the traverses of lakes, and long reaches of rivers, are seen in all their tedious extent, and the eyes are oppressed by the glare of the snow. The remainder was, consequently, the most rapid part of our journey. The weather was dark and snowy. Three large wolves followed us, and a pair of white owls serenaded us with their harsh notes during the night, as we lay on Buffalo Lake.

Next morning we set out at 2 o'clock. A dense fog concealed the land, and hid the Buffalo Mountain, so dreaded by superstitious voyagers; but we took our course west-north-west, across a very wide bay. After a smart walk of eight hours, in which we advanced twenty-eight miles, we landed for breakfast near the extremity of the lake, where we found the ice to be three feet thick. We encamped in the Methye River.

On the 23rd we started at 3 A. M. Some time before daylight there was a magnificent display of the *aurora borealis*, commencing with an arch of singular lustre in the north, which suddenly flashed up towards the zenith, and represented the interior of a stupendous cone, the apex and upper part being of the bright yellow hue, while the lower assumed a very rich carmine colour. I had scarcely time to admire this resplendent phenomenon, when it disappeared. We pursued as direct a line as the country permitted, now following the river, where we found it straight, then traversing the intervening woods. Our moonlight transit disturbed from their sleeping-places a couple of foxes, and several large coveys of white partridges. Early in the afternoon we reached Methye Lake, near the middle of which, on a long projecting point, we en-

camped, among firs of great size. While crossing the lake, I witnessed an extraordinary effect of the mirage caused by the rays of the evening sun. It covered the land to the west with a mist-like veil; and the ice, even close around us, appeared to *dance* with a strange undulating motion, as if tossed up and down on a heavy swell. I was walking about half a mile a-head of the rest of the party, and, chancing to look back, the people seemed to be seated on their sledges; but on their arrival at the encampment, when I taxed them with their laziness, they assured me that they had been on foot the whole time, and that I had also appeared to them in a recumbent attitude, borne forward as it were by some unseen power. Our dogs showing symptoms of sore feet, we equipped them all in shoes of white cloth.

After I had ascertained the latitude 56° 28′ 48·5″ N., we quitted our snug quarters at 3 A.M. of the 24th. Scarcely had we started when the weather became overcast and snowy; but we took our course, by compass, across the remaining section of the lake, to the celebrated Portage la Loche. The snow was very deep throughout this formidable barrier; and the white hares, which had been strangers to us since leaving

Lac la Crosse, now often leaped across our path. From the hills on the north side, a thousand feet in height, we obtained that noble view of the Clear Water River, which has been drawn with so much truth and beauty by Sir George Back; though the dark day, and the livery of winter, were unfavourable to our full enjoyment of the prospect. Launching down the steep and slippery descents, we turned off to the left, and halted for breakfast on the bank of a streamlet flowing into the Clear Water River, distant fourteen miles from the creek which the boats enter at the end of this long carrying-place. The Indians sometimes strike off from hence, through a hilly wooded country, direct to Athabasca Lake, and, as I knew that a saving of at least two days in distance might be effected by that route, I was desirous of adopting it; but none of my men had ever followed it, and, from the report of the natives, they declared it to be impracticable with sledges; we therefore turned our faces down the deep and picturesque valley of the Clear Water River, and advanced as usual till sunset. This is the best plan on such journeys, as the preparation of the encampment takes more time and labour, and, is never so well done, after nightfall. One of the pines, under shelter

of which we took up our night's lodgings, measured three yards in girth, at five feet from the ground.

25th.—There fell a light rain during the night, and a dense mist hung low down upon the sides of the lofty hills. We soon reached a narrow channel, where the stream rushes impetuously between overhanging turret-shaped rocks, and descended it for upwards of a mile; the water boiling and hissing under our feet, with numerous open places on either side of us. Proceeding alternately upon the river and through the woods, we crossed "Portage la Bonne," where two Indians had recently cut their hieroglyphics on the trees, to notify to their friends that they had passed on a hunting excursion, and what animals they had killed. This is a fine country for the chase, and so little frequented in the winter, that it may be regarded as an extensive preserve. We saw three moose-deer on the top of one of the hills; and their tracks, and those of the wood-buffalo, were numerous in every direction. The valley of the river is entirely sheltered from the inclement north and north-west winds, but its exposure to the east usually renders the snow deep and soft, as we found to our cost. It had rained smartly here in the beginning of the month, while it snowed elsewhere,

and over the sharp crust produced by the rain a foot of fresh snow had fallen. Our poor dogs sunk through both, and, with all our precautions, their paws were sorely galled. The passage of the cascades was rendered hazardous by a number of treacherous holes in the ice, which the snow concealed. Ten miles lower down, some strong sulphur springs issue from the left bank of the river, in a narrow channel formed by an island, leaving a copious deposit on the stones over which they flow. The water was nauseous to my people; but, being accustomed to the powerful mineral springs of Strath Peffer, I took a liberal draught, which doubly whetted the keen edge of hunger. We encamped soon after, and, the snow falling very heavily, we made ourselves covered huts with pine branches, in which we considered ourselves superbly lodged.

The travelling next morning was excessively bad. The weather was cloudy, and even oppressively mild for the violent exertion of wading through deep snow; but with the dawn a cool westerly breeze sprung up, which refreshed us, and rendered the atmosphere beautifully clear. Just before breakfasting we saw, on the northern hills, a large moose and a band of five wood-buffaloes sunning their fat sides—a sight sufficient to make the mouths of pemican-eaters water;

but they were beyond our reach, and, taking the alarm, quickly disappeared. The declivities of the hills seemed, as we passed along, completely chequered with the tracks of these and smaller animals. We slept at the mouth of the Pembina, or Red Willow River.

On the 27th our route lay chiefly along the river; the hills enclosing it became lower, and approached nearer together, depriving the valley of its former romantic character. A walk of seventeen miles brought us to the confluence of Clear Water River with the Athabasca. From the high point of "the forks" we enjoyed a fine view of that majestic stream, stretching away to the north, its broad bosom studded with numerous wooded islands, which give it a grand lake-like appearance. We now emerged from the deep soft snows of the valley, through which, as well as during the whole journey, I had myself raised the road, my companions being sufficiently occupied, each with the care of his sledge. The dogs, in fact, were so accustomed to follow me, that when, at any time, I quitted my usual station in front, they stopped, kept looking wistfully back, and the whips of their drivers failed to inspire them with the same ardour, till I resumed the lead, when they testified their satisfaction by straining to keep at my heels, the leader

often thrusting forward his black muzzle to be caressed. This fondness usually procured me the close society of a whole posse of them during the night, which, when not extremely cold, was anything but agreeable.* By marks on the snow it appeared that the owls (*strix cinerea*) were making sad havoc among the hares. In the evening a lynx sprang up the bank, at the very spot we were making for, and, on looking out, we saw our old friends, the wolves, following us at a respectful distance. They regularly established their night's quarters on the opposite side of the river.

Next morning a strong cold north wind blew, driving in our faces a storm of snow which almost blinded us. We marched against it for several hours, when, at an island, we fell in with a Chipewyan hunter, visiting his traps, and invited him to share our breakfast. After messing with the people, I gave him a cup of tea and a handful of biscuit, when I was no less surprised than pleased to see the poor fellow reserve the latter, to carry to his children at the lodge. At noon we spoke another hunter belonging to the same camp; he had just

* In consequence of the good treatment they received, half the number that left Red River with me reached Athabasca—the longest continuous journey ever performed by the same dogs. The others I exchanged on the route.

killed a badger, which he was taking home. These men were well-clothed, and supplied from Fort Chipewyan with everything necessary for this mode of life. The weather changed, and became clear and very cold. In many places we found the ice covered with water, which had overflowed from tributary creeks, and from open places in the river itself. The snow, too, was soft and deep; and our progress was much retarded by these circumstances. At dusk we encamped below the upper tar springs, among the huge pines and poplars, which are everywhere of a growth worthy of the noble stream whose banks they shelter and adorn.

It snowed as usual during the night, and the morning of the 29th was piercingly cold, a strong north wind sweeping up the exceedingly long reaches leading to Pierre au Calumet. Our dogs began to knock up one by one, and three were untackled all day. These lagged behind, unobserved, in the afternoon; and I had to send a man back to look for them. He met them just as our pertinacious followers, the wolves, were coming up; and saved the poor animals, who were in no condition to resist such powerful adversaries. In the plain districts many horses yearly fall a prey to their voracity.

The 30th was intensely cold, with a penetrating head wind, and not an incident occurred to vary the scene as we passed down the long monotonous reaches of the river.

The cold during the succeeding night was excessive. At the end of sixteen miles we made a land-cut of two miles in length to avoid a détour. The wolves having become very daring, lured on by the prints of the dogs' bleeding feet, I lay in wait for them, after the rest of the party had passed, and fired upon the foremost as they dashed up the bank, which effectually checked the pursuit. We encamped at the mouth of a small creek, thirty miles from Fort Chipewyan.

1st February.—This being the day I had fixed, on leaving Red River, for my arrival at Fort Chipewyan, we were on the move at 2 A. M. The morning was windy, but not cold; the sky was clear, and a vivid arch of the aurora spanned it to the north, but speedily resolved itself into a thousand flashes and coruscations of extreme brilliancy. Leaving the main channel by which the Athabasca pours its waters into the lake, we struck across the land to a minor branch, called the Embarras. We followed its narrow and devious course for several miles, rousing the moose-deer from their lairs

by the noise of our dog-bells. Crossing a short portage, we reached Lake Mamawee, where we despatched the small remainder of our provisions. Then continuing onwards with accelerated speed, at 3 P. M. we were warmly welcomed by Chief Factors Smith and Dease, who did not expect me for more than a month to come.

Thus happily terminated a winter journey of 1277 statute miles.* In the wilderness time and space seem equally a blank, and for the same reason—the paucity of objects to mark or diversify their passage; but, in my opinion, the real secret of the little account which is made of distance in these North American wilds is, that there is *nothing to pay*. Every assistance is promptly rendered to the traveller without fee or reward, while health and high spirits smile at the fatigues of the way.

* From Fort Garry to Fort Pelly . . . 394 miles.
„ Fort Pelly to Carlton . . . 276 „
„ Carlton to Isle à la Crosse . . . 236 „
„ Isle à la Crosse to Fort Chipewyan . 371 „

1277

CHAPTER III.

Occurrences at Fort Chipewyan, spring, 1837.—Traits of the Natives.

THE whole month of February was unusually mild, and at noon the sun not unfrequently asserted his increasing power by a gentle thaw. Messengers were continually arriving with favourable accounts from the Indian camps; a pleasing contrast to the preceding winter, which is rendered memorable to the poor natives by the ravages of an influenza—scarcely less dreadful than the cholera—that carried off nearly two hundred of the distant Chipewyans. I say *distant*, because all who were within reach of the establishments were sent for and carried thither, where every care was taken of them; warm clothing and lodgings were provided; medicines administered; the traders and servants fed them, parting with their own slender stock of luxuries*

* A few pounds of tea, sugar, &c., allowed to officers and guides, and purchased by the common-men, are called "luxuries" in Hudson's Bay. The old Canadian "voyageurs," who

for their nourishment; till even the cold heart of the red man warmed into gratitude, and his lips uttered the unwonted accents of thanks.

The first point determined, after my arrival, in reference to the expedition, was, that instead of one large boat for the coast, we should immediately get two built, of smaller dimensions. The purpose of this change was, to provide for the greater security of the party; to render our craft so light as to admit of their being carried over the icy reefs obstructing the passage along the western coast, and that they might afterwards be transported with facility, across the Coppermine portage, to another scene of operations. This step was the more necessary, as it was extremely doubtful whether the northern parts of Great Bear Lake produced timber fit for the construction of boats of any description, and as we should there be unprovided with a boat-house, forge, and many other requisites for that purpose, which we possessed at Fort Chipewyan. It will be abundantly evident, in the course of the narrative, that, with a single boat, the expedition must have terminated disastrous-

lament the degeneracy of their successors, are nothing loth to imitate their example in adding these comforts to their fare; and an encampment of the present day exhibits a regular assortment of tea-kettles, pots, and pans.

ly. To complete the crews, we required only two additional men, whom Chief Factor Smith promptly provided from among several volunteers, the service being now popular with the northern voyageurs. We likewise engaged, as hunters for Great Bear Lake, a Chipewyan family, comprehending an old man, his two sons and two sons-in-law, accompanied by their wives and children.

It is with sincere pleasure I take this occasion of observing, that the harsh treatment of their women, for which the Chipewyans were, not long since, remarkable, even among the North American tribes, is now greatly alleviated, especially among those who have frequent communication with the establishments. At Great Bear Lake I had many opportunities of witnessing the conduct of this particular family, and always saw the females treated with kindness.

The present Chipewyan character, indeed, contrasts most favourably with that of the party which accompanied Hearne on his discovery of the Coppermine River, and who massacred the unhappy Esquimaux, surprised asleep in their tents at the Bloody Fall. A large proportion of the Company's servants, and, with very few exceptions, the officers, are united to native women. A kindly feeling of relationship thus exists be-

tween them and the Indians, which tends much to the safety of the small and thinly scattered posts, placed, as they are, among overwhelming numbers, were those numbers hostile. The rising class of officers have begun to marry the young ladies educated at Red River, which will tend to give a higher tone to the manners and morals of the country, without, it is to be hoped, diminishing those mutual feelings of good-will that now subsist between the Indians and the traders resident amongst them.

The month of March proved as severe as February was mild. The thermometer fell to —36°, and ranged from —20° to —30° for many days. The aurora frequently exhibited its fantastic lights, but only once or twice vividly displayed the prismatic colours. An aged Cree hunter arrived with his family. Feeling his strength—which had borne him through forest and flood for many a year—no longer equal to the chase, the old man said that he was come to end his days at the Fort. With care and attention, however, he soon began to revive; the whole family were furnished with everything necessary, had the same rations assigned them as the regular servants, and continued to live in comfort at the establishment. Many other Indians came in

from the different camps with furs and for supplies.

From some of the Chipewyans I learned that they had, in the course of the preceding summer, met with a party of Esquimaux at the confluence of the noble Thēlew or Thēlon River with the Doobaunt of Hearne, below the lake of the latter name, and not far from the influx of these united streams into Chesterfield Inlet. This meeting was of the most amicable character, and they spent a great part of the summer together. The Esquimaux even proposed to send two of their young men to Athabasca, inviting the same number of Indians to pass the winter with them. The arrangement was agreed to by both parties, but was frustrated by some petty jealousy among the women. They also informed me that, in 1832, some of the Athabasca Chipewyans accompanied the Churchill branch of their tribe on their annual meeting with other Esquimaux at Yath Kyed, or White Snow Lake of Hearne, which receives the united waters of the Cathawchaga and the rapid Kasan, or White Partridge River. This remarkable change, from mortal hatred to frank and confident intercourse, is solely owing to the humane interposition of the Company's officers, who neglect no opportunity of

inculcating on the minds of these savage tribes the propriety of their forgiving ancient wrongs, and uniting together in the bonds of peace and friendship. By the same influence, the warlike Beaver Indians of Peace River have been, of late years, reconciled to their old enemies—the Thœcanies of the Rocky Mountains, and the Carriers of New Caledonia.

April opened with the unpromising temperature of 5° below zero, but the weather soon became mild and pleasant. On the 13th there fell a copious shower of rain; on the 17th the first swans were seen, on the south side of the lake; and on the 21st several flocks of wild fowl flew past the establishment. In the woods the cranberry and juniper disclosed their crimson and purple fruit, so long hidden beneath the snow; the buds of the willow began to appear; from bush and tree a tribe of little birds twittered and carolled in the glad sunshine; the axes of the woodsmen resounded from the adjacent hills; while the numerous Indian tents, pitched on the rocks around the Fort, poured forth a swarm of youthful savages, who gambolled in the full activity of untutored nature. Spring—joyous, animated spring—was returned, and the death-like silence of winter was past!

During this month I had the most convincing

proofs of that recklessness which prompts the Indian to prefer a momentary gratification to a substantial benefit. Earnest applications were made by the assembled Chipewyans for the re-introduction into their country of ardent spirits, which had been for many years discontinued by the Company's humane policy. Their attachment to the poisonous beverage, however, remained so strong, that, every season, parties of the tribe traversed the continent to Churchill, on Hudson's Bay, with no other purpose than to obtain it. At length its use was prohibited there also, and the Chipewyans renewed their solicitations. Instead of gaining their point, they were now justly reproved by their benefactor, Mr. Smith, and obliged to confess their own folly. The following is an extract of the Company's standing orders on these subjects:—"That the Indians be treated with kindness and indulgence, and mild and conciliatory means resorted to, in order to encourage industry, repress vice, and inculcate morality; that the use of spirituous liquors be gradually discontinued in the few districts in which it is yet indispensable; and that the Indians be liberally supplied with requisite necessaries, particularly with articles of ammunition, whether they have the means of paying for it or not." It is equally the Company's inclination, and their

interest, to render the natives comfortable. It is when they are well-clothed, and amply provided with ammunition, that they are best able to exert themselves in collecting furs and provisions. But, so far is it from the Company's wish to acquire an undue influence over them, by loading them with debts, that repeated attempts have been made to reduce the trade to a simple barter. In order to effect an object so beneficial to the natives themselves, the arrears of the Chipewyans have been twice cancelled since the junction of the two Companies in 1821; but the generous experiment has signally failed. The improvidence of the Indian character is an unsurmountable obstacle to its success, and in the Chipewyans is aggravated by a custom which the whites have not yet been able wholly to eradicate. On the death of a relative, they destroy guns, blankets, kettles, everything, in short, they possess, concluding the havoc by tearing their lodges to pieces. When these transports of grief have subsided, they must have recourse to the nearest establishment for a fresh supply of necessaries, and thus their debts are renewed. The debts of the deceased are, in every case, lost to the Company. The Indian debt system is, in reality, equivalent to the practice, in many civilised countries, of making advances to hired servants

previous to the commencement of their actual duties. This is particularly remarkable among the French Canadians, who can scarcely be induced to undertake any work or service without first receiving part payment in advance. Their improvidence approaches to that of the Indian, and produces similar effects.

It is not perhaps generally known that, in some parts of the Indian territory, the hunting-grounds descend by inheritance among the natives, and that this right of property is rigidly enforced. Where no such salutary law prevails, their main source of wealth, the beaver, would soon be exhausted by the eager search of the hunters, were it not for the judicious regulations of the Company, whose officers have, for many years past, exhorted the natives to spare the *young* of that valuable animal. In this praiseworthy design they have met with increasing success, according as the eyes of the Indians have been opened to their own true interests. But the attempt will be understood to be one of extreme difficulty, in consequence of that passion for depriving the animal creation of life, so deeply implanted in the breast of the North American Indian, that it costs him a pang to pass bird, beast, or fish without an effort to destroy it, whether he stands in need of it or

not. Near York Factory, in 1831, this propensity, contrary to all the remonstrances of the gentlemen of that place, led to the indiscriminate destruction of a countless herd of reindeer, while crossing the broad stream of Haye's River, in the height of summer. The natives took some of the meat for present use, but thousands of carcases were abandoned to the current, and infected the river banks, or floated out into Hudson's Bay, there to feed the seafowl and the Polar bear. As if it were a judgment for this barbarous slaughter, in which women and even children participated, the deer have never since visited that part of the country in similar numbers. It is to their own headstrong imprudence, which the example and influence of the traders cannot at all times control, that the occasional deaths by starvation among the natives, and still more rare abandonment of the aged and helpless, must be ascribed.

The quantity of provisions furnished by the Indians to the establishments throughout the northern districts is inconsiderable. In the winter season it is generally limited to the rib-pieces of the moose, red, and rein-deer, half-dried in the smoke of their tents, and the bones removed for lightness of carriage; to which a

few tongues are perhaps added. In the course of the summer, when the animals are easily hunted, and there is water transport everywhere, the more industrious families usually bring to their Fort a bale of "dried meat," consisting of the fleshy parts of the deer cut into large slices and dried in the sun, with a bladder or two containing fat; or a bag of "pounded meat," which, when mixed with boiled fat, forms the renowned pemican. When these scanty supplies prove insufficient, with the produce of their own fisheries, and, where the climate is suitable, of the ground cultivated, to support the few people who reside at each of the widely separate posts, two or more young active Indians without family, or with but small families, are engaged as "Fort hunters," and regarded as regular servants. The duty of these hunters is confined to the killing of large animals for the establishment; and such part of the meat as is not required by themselves and their families, is transported thither, with dogs and sledges, by the servants belonging to the place. To become Fort hunter is the ambition of a northern Indian, for the situation is at once an acknowledgment of his skill, and places the finest and gayest clothing at his command. It is, however, necessary to change them from time to time, as an Indian no sooner forms

the notion that his services are indispensable, than from that moment he slackens his exertions. Every prudent manager of a post endeavours to procure more provisions than the actual wants of his charge. He is thus enabled, when scarcity or ill-success overtakes his Indians, to afford them a timely, and always a gratuitous relief. I do not speak here of the comparatively mild climate of the Saskatchewan, where the mounted plain hordes often glut the establishments with the spoils of myriads of buffaloes, and threaten their existence by their dangerous visits. Nor are these remarks applicable to the still more southerly districts bordering on Canada, where the natives, as well as the people in the Company's service, are in a great measure fed upon imported provisions, purchased by the Company from the Americans. The principle universally acted on throughout the vast and now admirably governed fur-countries is, that the true interests of the native Indian, and of the white man who resides in voluntary exile on his lands, are indissolubly united.

All attempts to raise farm produce among the rocks at Fort Chipewyan have proved abortive, even potatoes being brought down from Peace River; but there are never-failing fisheries in Athabasca Lake. The few horses and oxen

required for hauling firewood to the place are maintained, during the long winter of seven months, upon coarse grass cut in the swamps, and, when that fails, upon fish.

May, like April, was a fine month; but, till near its close, there was little sultry weather. Swallows appeared about the houses on the 19th; and, during the whole month, the geese,* on their northward migration, afforded the native camp food, and the Fort sportsmen amusement. The environs of the lake, for miles, resounded with the fusilade, as if bands of skirmishers, hotly engaged, were scattered over the country.

On the 11th we had a smart thunderstorm; and another, more distant, a few days afterwards: these were the only ones of the spring. Owing to the general coolness of the season, and the low state of the waters, the ice lingered on the lake until the 22nd;† a party of Indians having crossed it, opposite the Fort, only the day before. It continued alternately driving and stopping for several days.

* There were four kinds of geese, the Snow, Canada, Laughing, and Hutchin's; of which the first were by far the most numerous.

† The eastern part of the lake, which, unlike the western, is traversed by no large river, never opens till the month of June.

On the 23rd the Peace River boats reached "English Island," and their cargoes were carried by land to the establishment, a distance of two miles.

On the 25th, Chief Factor M'Leod arrived with the canoes from Fort Resolution. This gentleman, already known to the public as Sir George Back's intrepid assistant at Great Slave Lake, volunteered, in the handsomest manner, to conduct a party of Chipewyans to meet us at the mouth of the Great Fish River in August 1838. Circumstances, however, prevented our availing ourselves of his gallant proposal; and, without the aid of an experienced officer, it would have been vain to attempt, through Indians, making any deposit of provisions, &c., at Lake Beechey, as suggested in our instructions.

From the mean of a great number of observations, I deduced the position of Fort Chipewyan, which accords well with the results in Sir John Franklin's first and second journeys. Lat. 58° 42′ 38″ N.; long. 111° 18′ 32″ W. The variation, by several sets of azimuths, was 26° 6′ 23″ E., showing an increase of 36′ 46″ since 1825, or about three minutes per annum.

Our sea-boats were now finished. They were light clinker-built craft, of twenty-four feet keel and six feet beam, furnished with wash-boards,

and carrying each two lug-sails. They were expressly adapted for a shallow navigation, by their small draught of water; were payed with a mixture of clear pine-resin, which gave them a light and elegant appearance, and with the coloured earths of the country we manufactured paints for their further decoration. So perfectly alike and admirable were they, that they were honoured with the classical appellations of the twins Castor and Pollux; while the more capacious bateau for Great Bear Lake gloried in the redoubtable name of Goliah. Each of the sea-boats was provided with a small, oiled, canvass canoe, and portable wooden frame, which proved highly serviceable in the sequel.

On the 30th we had a trial of our boats on the lake in a stiff breeze, and were well satisfied with their respective performances.

CHAPTER IV.

Descent from Athabasca to the Polar Sea.

HAVING, with Chief Factor Smith's kind and liberal assistance, satisfactorily completed every arrangement, the expedition took its departure, on the evening of Thursday the 1st of June, from Fort Chipewyan, under a salute, which we returned with three hearty cheers. As soon as the first shade of regret at parting from so sincere a friend had passed away, we warmly congratulated each other on being at length fairly embarked in the interesting service of discovery. Our hopes of achieving what far more distinguished names had left undone were high, and we may be pardoned if we exulted in the flattering prospect. Traversing the western extremity of the Athabasca Lake, we entered Rocky River, its principal outlet, and encamped. We formed a small but happy party; and as our white tents glittered in the rays of the sun, now declining to the horizon after his long

diurnal course, with the broad river running in front, and around us the green woods, the view was pleasing, if not picturesque.

The succeeding morning broke sweetly, and we were on the water at 3 o'clock. The day proved sultry, but a gentle northerly breeze occasionally freshened the air, and the men rowed with energy. Passing the confluence of the noble Peace River, we entered the augmented volume of the Great Slave River, which we descended for upwards of thirty miles, and encamped. It thundered and rained a little in the evening. We could not help being struck with the rapid advance of vegetation, now that we were beyond the chilling influence of the lake. Here the bright green of the poplar and willow blended with and lightened the deeper and more durable verdure of the pine.

On the 3rd we were favoured with a fine breeze on the quarter, and our craft shot swiftly down the wide stream for nearly forty miles; when, coming to a rapid, we lowered sail, and ran it in excellent style. The Cassette Portage soon followed, and at its north end we encamped early; a heavy rain falling, which continued throughout the night. In the afternoon we saw some Indians, from whom we obtained an acceptable supply of fresh moose meat.

4th.—We were involved all day among portages and rapids; the river rushing impetuously, in numerous channels, among rocky wooded islands, with a breadth of from one to two miles. Many patches of snow still adhered to the river banks. We encamped on the Mountain Portage.

A considerable part of the 5th was occupied by the Pelican Portage, and that of The Drowned. The desert-bird frequents the first in prodigious numbers; and the rocky islands, a mile out in the stream, were crowded with their white ranks reposing after their morning's fishing. After passing these turbulent barriers, we descended the now tranquil river for about five leagues, and found our hunters (who had been despatched two days a-head), with a large camp of other Chipewyans, squatted, like so many beavers, in their lodges on the muddy banks of the Salt River. We chose our station in the neighbouring woods.

On the morning of the 6th I mustered in the camp three of the largest canoes, and ascended Salt River, in order to procure a supply of its most useful production, and to view the beautiful plain represented with so much spirit by Back's able pencil. The distance to the opening of the plain exceeds twenty miles, following the tortuous course of the stream, which

is shallow, and, as we advanced, became salt as brine. We had not the good fortune to fall in with buffaloes, though their tracks, and those of moose and bears, were numerous; but consoled ourselves in an attack upon the wild fowl attracted hither by the briny waters. There were swans; Canada and laughing geese; several species of ducks, the most remarkable of which were the beautiful light blue; and a very small but splendidly variegated teal, so tame as almost to allow itself to be caught with the hand. We had not to search long for salt: a single mound on the plain furnished us with thirty bags of the finest quality, and seemed undiminished by the removal of a quantity sufficient for our own wants, and for the supply of the Athabasca and Mackenzie River districts. A mountain, which terminates the plain at the distance of four or five miles, glistened as if incrusted with the same pure white substance. From the hill-sides gush delicious springs of fresh water. Having finished our work, we bivouacked and feasted under as lovely an evening sky as fancy could paint. A sudden gust of wind, which bent the tall pines and poplars like wands, cleared off the musquitoes; and we enjoyed a few hours of refreshing rest in the soft twilight, for there was no longer any night in these regions.

We returned to the boats the following day at noon. The interval had been employed by the carpenter in re-caulking the seams opened by the frost and heat, which rendered them perfectly tight during the remainder of the voyage. As soon as this operation was completed, we re-embarked, and descended Slave River for twenty miles.

The 8th was fine, but a fresh north-west wind much retarded our progress; and, though we were on the water fourteen hours, we advanced little more than forty miles. The Indian flotilla came up to us while ashore breakfasting. They had two large beavers on board, just killed, and a little cub, which they picked up as it was helplessly carried down by the stream. We encamped at Stony Point, which was strewed with fragments of gypsum. Our journey next day was precisely similar. Though travelling directly northward, the warm limestone bed over which the river flows nourished an advanced vegetation. We several times put ashore, and availing ourselves of the willowy covert, here in full leaf, shot a number of geese that were basking on the sunny beach. We halted at a late hour below the channel called Rivière à Jean.

Following the principal mouth of the river,

on the morning of the 10th we entered Great Slave Lake. Every eye was directed across that inland sea, and great was our mortification when, with the glass, we discerned an unbroken line of ice embracing the land beyond Moose-deer Island. We advanced to the edge of that unwelcome barrier; but it was firm and immoveable, threatening us with a long detention. Turning within the islands, a portage, performed with the aid of canoes, brought our provisions and other property, in the course of the day, to Fort Resolution; the boats crossing the shallows light.

From the 10th to the 21st of June the ice kept us prisoners at Fort Resolution, occasionally retreating a mile or two, as if to tantalize us, then closing and driving the fishermen and their nets ashore.

On the 12th we indulged our people with a dance, though the constant daylight was rather unfavourable to the dark complexions of the ladies. It was concluded by a general supper, at which tea was the beverage, all intoxicating liquors being, as already noticed, excluded from this sober land.

The 13th was marked by a thunderstorm of a terrible violence, unusual in these high latitudes; to which succeeded a week of beautiful

weather. The games and sports of the people without the gates were generally at their height at midnight, when the coolness of the atmosphere incited to exertion. At every shout the echoes ran along the floating ice in the bay, passing from one fragment to another, and producing a succession of sounds, that became gradually softer and fainter, till they seemed to mingle with the horizon. The mirage, too, exhibited some curious appearances. Mr. Dease vaccinated all the young people, Indian or half-breed, at the place; a benefit already conferred on the whole concourse of natives at Fort Chipewyan. Several sets of azimuths made the variation here 37° 16′ 30″ E. The variation found by Back, in 1833, was 37° 20′; and by Franklin, in 1825, 29° 15′ 9″ E. For the last four years, then, the quantity would seem to have remained nearly stationary, but from 1825 to 1833 to have increased annually one degree; while at Fort Chipewyan, as formerly stated, the annual increase, since 1825, has only been about three minutes. Local attraction and difference of instruments have probably a share in these discrepancies, which might otherwise throw some light upon the *motion* of the magnetic pole. In this manner was the delay beguiled; but our main object languished, and many an anxious glance was

directed to the ice, which a southerly breeze at length wafted outwards on the morning of the 21st. We now embarked in the Goliah all the dogs I had brought with me from Red River, which, with some additions, numbered twenty-one, the complement of seven sledges, and proved most unruly passengers.

We set sail in the forenoon of the 21st, having despatched our hunters along shore two or three days before. The day was delightful, the wind light; and we had advanced about forty miles, when we found the Indians encamped on a point close to the fixed ice, and with them we put up late in the evening. A westerly wind opened a passage for us during the night. After pulling against it for a few hours, and forcing our way in many places through the loose ice, we landed to breakfast in Sulphur Cove. The springs here are well worthy of inspection. They are large, clear, and leave a deep sulphureous deposit wherever their waters run, as well as in the fountains themselves. The wind blew strongly now; and our Indian companions, having to repair their canoes, had not come up. They at last made their appearance; and, the breeze falling, we started at 6 P. M. and proceeded all night.

At 5 in the morning of the 23rd we made

Hay River, and, the ice being jammed to the shore close beyond it, we halted for the remainder of the day. A net set across the stream supplied us with a number of dory and inconnu, while its banks furnished wild onions in abundance.

On the 24th we found the ice in many places still wedged-in to the land, and, though we pushed through it with unabated energy all day, it was midnight when we reached the head of the great river Mackenzie, where we encamped.

Sunday, 25th.—After rowing against a strong contrary wind, to very little purpose, all the morning, we caught sight of the Fort Simpson boats ascending the current under sail. We immediately landed on a small island, and spent the rest of the day with our esteemed friend Chief Trader M'Pherson. There were several arrangements to concert with that gentleman touching the expedition; which done, he resumed his route to Portage la Loche about midnight, and we remained wind-bound on our islet. We afterwards learned that he experienced quite as much difficulty as ourselves in making his way through the ice of Great Slave Lake.

The gale moderating on the 26th, we took our departure in the afternoon. After a couple of

hours' tough pulling, during which we shipped some water, and were assailed by several heavy squalls with rain, the wind came round upon our starboard bow. Setting sail,—for the boats stood well within four points,—we made tolerable progress till 10 P. M., when we put ashore for supper, and to wait for our Indian squadron, now left far behind. The richness of the foliage on the banks of the Mackenzie, after issuing from the inhospitable climate of Great Slave Lake, was refreshing to the eye; but the musquitoes acted as a check upon our admiration, and we were glad to re-embark before midnight.

The weather was now beautiful; a light cool breeze played upon the water; our men were in high spirits, and lightened the labours of the oar with the enlivening strains of the Canadian voyageur songs. Soon after 2 A. M., just as the sun emerged in glory from his short rest, "firing the high tops of the eastern pines," we approached the first camp we had yet seen of the Dog-rib Indians. They came out in their curiously-shaped canoes to welcome us ashore, their animated gestures and sparkling eyes testifying the pleasure they derived from the meeting. Their tents were pitched on a pretty point, just within the margin of the green wood, where we held an hour's talk with these kind inoffensive people.

I noticed some fine faces among the younger men; and the women, though not so good-looking, have an affectionate and pleasing address. They all, down to the very children, expressed their thanks by the French abbreviation, "merci," for the various articles presented to them; a most agreeable contrast to the sullen indifference of the Chipewyans. Our hunters not making their appearance, we engaged one or two of the most active youths to escort them to Fort Simpson, and pursued our way.

Several more Dog-ribs were passed during the day; and at 10 P.M. we landed at one of their huts, placed on an island near the site of the ill-fated Livingstone's establishment, who, with most of his crew, was massacred by the Esquimaux, many years ago, on his attempting to open a trade with them. The children and dogs were huddled together asleep when we arrived, and formed rather a queer group. We continued our route at 11, and, having rowed for an hour, lashed the boats together, and resigned them to the guidance of the wide deep stream.

When we awoke on the 28th, we found that we had drifted three or four leagues with the current. The morning sun shone brilliantly, tinging the broad waters and the wood-crowned cliffs with golden hues. The verdure on the banks

was luxuriant, and, viewed in that glowing light, the scenery produced a very imposing effect. A fine breeze bore us swiftly down the stream, and, crossing the mouth of the picturesque River of the Mountains, we reached Fort Simpson.

Our hunters cast up in the forenoon of the 29th. They had stove one of their canoes, had narrowly escaped foundering in the attempt to follow us near the shore in the boisterous weather of the 26th, and were much fatigued. The fields here looked well, but the young barley had a troublesome enemy in the passenger pigeons. Except one in Salt River, we saw none of these graceful birds elsewhere throughout our journey. The wild rose and a variety of flowers ornamented the woods. From two meridional observations, the latitude of this establishment is 61° 51′ 25″ N.; the variation of the compass 37° 10′ E.; and, at a subsequent period, the longitude, 121° 25′ 15″ W. was obtained from a number of lunar distances. The latitude deduced by Sir John Franklin, in 1825, from the *dead reckoning*, was 62° 11′, being nearly twenty miles too far to the north; an error easily accounted for by the difficulty of making a just allowance for the strength of an unequal current. The temperature in the shade at noon was 62°. We had some blacksmith-work to get executed,

provisions and sledges to take on board, and other matters to arrange, which occupied the time till sunset, when we set our sails to a light southerly breeze. At no great distance we passed a conflagration of the woods on the river bank, which at one moment threw a long reflected beam of light across the water, and, the next, broke into a thousand quivering flashes on the curling eddies.

At 2 o'clock the following morning we came in view of a branch of the great Rocky Mountain chain. The day was lovely, and I fed my eyes with gazing on scenery so novel and romantic, that forcibly recalled to mind my native highlands. At noon we passed within a few miles of the mountains, where they cause the river to change its course from west to north. Their summits were still streaked with snow, but on the face of the cliffs we distinctly perceived the stratification noticed by Sir John Franklin. At midnight the men took in their oars, and we drifted down the stream.

July 1.—When our labours were resumed at 5 o'clock, we found ourselves at the foot of "the hill by the river side" ascended by that dauntless traveller, Sir Alexander Mackenzie, in July 1789. A camp of Dog-ribs stood on the opposite bank: they were much alarmed, and were

taking to flight, when we called out to them who we were, upon which they instantly turned their canoes towards us. They were in dread, they said, of the Mountain Indians, and did not know what to make of our noiseless approach. We treated them to their favourite luxury, tobacco, and fell in with many more of them during the day. At 10 P. M. we reached Fort Norman, having travelled two hundred and fifty miles in exactly forty-eight hours.

At this northerly spot, situated in lat. 64° 40′, a small quantity of green barley, and of potatoes, *almost* as big as pigeon eggs, is now annually raised. I was afterwards surprised to find this vain attempt to vanquish nature made even at Fort Good Hope, with turnips and radishes. Next day our hunters cast up about noon. We hired three Dog-ribs to guide and complete the crew of the luggage-boat to Dease River, at the north-eastern extremity of Great Bear Lake, where our winter quarters were to be established. John Ritch, our boat-builder, was intrusted with the execution of this most important duty, assisted by John Norquay and Laurent Cartier, fishermen, and François Framond, a rough carpenter. Ritch's instructions were, to erect the necessary buildings on a very small scale, agreeably to a plan drawn by me, to establish a fishery

in the best situation he could discover, and to keep our Chipewyan hunters and the native Indians employed in collecting the meat of the reindeer and musk-ox against our return from the coast. From the trading goods we selected such articles as we considered most suitable for presents to the Esquimaux; the rest, together with a small surplus of provisions, was to be deposited at our new establishment. The stock of provisions appropriated to our coasting voyage, and the long retreat from the mouth of the Mackenzie to winter quarters, was thirty bags of pemican, each weighing ninety pounds, and ten hundred-weight of Red River flour. This was an ample allowance for the whole season of open water; and we found that the union of flour with the pemican produced a saving of one-third in the consumption. Three pounds of pemican alone form a man's daily ration; but, though the food is highly nourishing, it soon becomes distasteful and cloying. With the flour it makes an excellent, and not unpalatable, soup, or rather "bergoo," which formed our own sustenance, as well as the men's, and was relished by all. These victuals were used by the crews without any restriction; and it was ascertained, at the end of the voyage, that the average daily consumption had been exactly two pounds per man. Our crews for

the sea were composed of the following individuals:—

James M'Kay,	Steersman,	Highlander.*
George Sinclair,	Ditto,	Half-breed.*
François Felix,	Bowman,	Canadian.†
Pierre Morin,	Ditto,	Ditto.
George Flett,	Middleman,	Orkney sailor.
Charles Begg,	Ditto,	Ditto.
William M'Donald,	Ditto,	Highlander.
Hector Morrison,	Ditto,	Ditto.
John M'Key,	Ditto,	Canadian Highlander.
Peter Taylor,	Ditto,	Half-breed.*
François Boucher, Ferdinand Wentzel,	Half-breed lads, fifteen or sixteen years of age.	

Everything being thus settled, we all took our departure together at sunset.

After a splendid trial at the oar, which served to shew the superiority of the little sea-boats, we came in view of Bear Lake River, at 3 o'clock on the morning of the 3rd. We landed a short distance above it, where Ritch embarked a supply of unctuous earth to whitewash our intended residence, and he was directed to procure some black chalk near Port Franklin. Wood-coal was in a state of combustion for several miles on both sides of the Mackenzie, and these natural fires seem to have spread considerably since last described by Dr. Richardson.

* Three of Back's crew in 1834.

† One of Franklin's men in 1826.

The jets of smoke, issuing in many places from the perpendicular face of the clayey cliffs, presented a singular spectacle. The combustion had in many places scorched the layers of unctuous earth that interstratify the coal formation, and turned their surface to a lively red colour. After spending some time ashore in the examination of these curious phenomena, we parted from our comrades with three hearty huzzas, displaying the British ensigns as we launched into the broad, swift stream. On either hand rose the Rocky Mountains and the Eastern Hills, now shadowed by floating clouds, now reflecting from their snowy peaks the dazzling sunshine. The scene was to me enchanting, and its excitement was increased by our rapid descent of the river. We saw a few Indians during the day, from whom we procured some of the fish called Back's grayling, the " wing-like fin" of the Esquimaux. Our progress was continued, as usual, all night.

Early the following morning, a light breeze filled our sails for a while, but soon died away. We breakfasted on the curious madrepore rocks above " the Rapid," which we descended at noon. In the evening we spoke a large camp of Hare Indians, who were fishing in the eddies along The Ramparts. That singular defile is well named; but its only garrison consisted of a legion of

swallows that nestle in the summits of its rocky precipices. These now echoed with the shouts of the natives, who followed us, with their whole pigmy fleet, to Fort Good Hope, which we reached between 8 and 9 o'clock, and were joyfully welcomed by Mr. Bell, who is son-in-law to Mr. Dease.

The establishment is now placed on the right bank of the river, opposite the upper Manitoo Island, where it stood for several years. The new situation is elevated; a precaution rendered necessary by the entire destruction, in June, 1836, of the former post, at the disruption of the ice, which rushed down with such overwhelming force as to sweep almost completely over the island, though several miles in extent, cutting down the timber, like grass before the scythe, and burying the place under two fathoms water. The terrified residents took to their boat, and escaped, almost miraculously, into a small lake in the centre of the island. There the ruins of the overthrown wood averted the fury of the inundation; and in this place of refuge they remained, with the ice tossed up in huge fragments, forming a gigantic wall around them, till the danger was past. We found here five Loucheux, from whom we learned the distressing fact, that three of their tribe had been killed, and a fourth

desperately wounded, by the Esquimaux in the preceding month. This unhappy quarrel precluded the prosecution of a design, which we had formed, of taking two of the Loucheux with us to the coast as substitutes for Esquimaux interpreters; although the men who had been applied to by Mr. Bell were desirous of accompanying us at all risks. These people are distinguished from every other Indian tribe with which we are acquainted by the frankness and candour of *their* demeanour. Their bold countenances give expression to their feelings, and a bloody intent with them lurks not under a smile. Among the aborigines of North America, the Loucheux alone have never imbrued their hands in the blood of the whites. They amused us during the night with their dances, which abound in extravagant gestures, and demand violent exertion. The Hare Indians afterwards exhibited theirs, in which many of the younger women joined; whilst the old ones got up a crying-match, at a little distance, for some relative whom they had recently lost.

On the 5th, we had a conference with the Loucheux, in which we declined their reiterated offers to send two, or more, of their number with us along the sea-coast, assigning the late murders as the cause of this resolution. At the same

time we laboured to dissuade them from their plans of retaliation and revenge. They expressed their sorrow at our determination to expose the lives of so small a party among such a treacherous people as the Esquimaux; earnestly cautioned us to be on our guard in every meeting with these perfidious savages, especially in the act of *embarking*, the moment they usually select for an attack; and declared, that if the latter injured us—whom, in common with all the whites, they regarded as their fathers and friends,—the whole tribe would combine to exact a terrible vengeance. To this comfortable assurance we replied, that we ourselves entertained no apprehensions, and therefore enjoined them to banish all useless fears on our account. It is but justice to the Esquimaux to state, that, from our inquiries, the Loucheux appear to have drawn the above chastisement upon themselves. For several years they had exacted, and received, a gift, as "blood-money," from the former, on account of a Loucheux whom they asserted to have died of his wounds in an old encounter. On this last occasion three of the Loucheux repeated the annual demand, with which the Esquimaux were about to comply, when unfortunately the very man, so long reported dead, made his appearance. On this, the Esquimaux, after reviling the Loucheux for their

falsehood and extortion, fell upon them; and, of the four, one only escaped, wounded, by flying to the woods. The traders have long been at great pains to effect a permanent reconciliation between these hereditary enemies. For this purpose, in 1817, and again in 1819, Mr. Dease gave considerable presents to the Loucheux chief to negotiate a peace, which lasted for several years.

We waited to obtain some observations, which gave the lat. 66° 16′ N., variation 44° 12′ 3″ E. The temperature of the air was 72°. We then took our final departure for the ocean, and soon crossed the Arctic circle. At 9 P. M. we put ashore for supper, and at 10 re-embarked.

The weather on the 6th was still warmer, the thermometer in the shade standing at 77°, and rising 30° higher when exposed to the sun in the boat. The majestic river and its high banks were steeped in a flood of light, and, except the diminutive size of the wood, there was nothing in the landscape to suggest the thought that we had penetrated so far into the regions of the north. At 5 P. M. we reached the spot where Fort Good Hope stood during Sir John Franklin's last expedition, and landed to obtain the variation; after which we pursued our route throughout the night.

On the 7th the stunted woods were in several places on fire. The river banks were lined with straggling huts of the Loucheux, formed of green branches. The inhabitants of these primitive dwellings came off in numbers, in their canoes, to visit us, and loud were their vociferations as we came successively in sight of their little camps. The aged hobbled after us along the beach, the women whined and simpered after their most attractive fashion, and the children, "in puris naturalibus," crowded round our gaily painted boats to see the wonders they contained. Wherever we landed, logs were instantly carried to the water's edge, to enable us to step ashore dry-shod. A small present of tobacco to each of the men, with a few beads or needles distributed among the women and children, satisfied their modest desires; and, for a trifling remuneration, they supplied us with as much fresh and half-dried fish as we chose to take on board. We remarked among them some knives and buttons, apparently of Russian manufacture, obtained from the Esquimaux during their intervals of amicable intercourse. The deer-skin jackets of the men have long flaps behind, reaching almost to the ground, and shaped like a beaver's tail. Like their neighbours of the sea, both sexes wear breeches; a distinctive costume from that of the

other northern tribes. In the afternoon we passed through "the Narrows," where the Loucheux chief was encamped, like a brave general protecting his frontier. We had given a passage from Fort Good Hope to one of his young men, who seemed to consider himself as not a little honoured by our attentions; and he now explained to the chief our intention not to take any of his people to the coast. Yet such was their confidence in or regard for us, that several again volunteered their services. After thanking them, and acknowledging their kindness by some small gifts, we re-embarked. We had provided ourselves with an Esquimaux vocabulary, which we hoped would serve our purpose in our intercourse with that singular race; but, to guard more effectually against danger, we now issued to each of the men a gun and ammunition, to be used only at our express command. We supped at Point Separation; and, as we passed the mouth of Peel River, had the satisfaction, new to most of the party, of beholding the sun at midnight, more than his own diameter elevated above the horizon.

Just as our people were almost exhausted with rowing and the merciless assaults of the musquitoes, a gentle northerly breeze sprang up in the forenoon of the 8th, and for a while cleared the

air of our tormentors. We saw, in the course of the morning, two reindeer, and a female moose followed by her fawns, but very few wild fowl. Several fine views of the Rocky Mountains opened as we passed down the winding western channel. Landing in the evening on an islet in an expansion of the stream, we found a *cache* of dried fish, wooden sledges shod with bone, reindeer horns, and other articles left by the Esquimaux. We disturbed nothing, but appended to the stage a few trinkets, with a hieroglyphical letter carved on bark, intimating that the donors were white men, in two boats, on their way to the western sea. After supping we resumed our nocturnal route.

On the morning of Sunday the 9th, a strong southerly wind very opportunely arose, before which we made rapid progress, keeping always to the extreme left, in a narrow serpentine channel washing the foot of the mountains. About 8 A. M., on turning a sharp point, we came suddenly upon an Esquimaux oomiak, containing four women and a couple of dogs. The ladies, throwing off their coverings, leaped ashore, and fled through the willows with the utmost precipitation. We did not land, but passed on under full sail. Finding that there was still no appearance of the sea, we concluded from this

circumstance, and from the greater distance to which the spruce-trees extended,* that we were now following a more westerly branch of the river than that by which Sir John Franklin descended. At 10 o'clock we landed to breakfast, and to examine the circumjacent country. It embraced rich and extensive meadows, enamelled with flowers, intersected by the river channels, and covered with deserted wooden huts of the Esquimaux. This open tract seems much frequented in summer by moose and reindeer. One of the former appeared at no great distance on an island, and, after scanning us for an instant, trotted off at a great rate. Scarcely had we made these remarks, when we perceived a single kayak gliding down the stream. Its conductor, after indulging for a while in noise and gesticulation, landed on the opposite bank, laid his canoe on the beach, pulled off his boots and habiliments, and seemed inclined for a run. But on our shouting the well-known "teyma," and hoisting a flag, he changed his mind, and, resuming his deer-skin shirt, paddled fearlessly across. He was a good-looking, athletic, middle-aged man, and soon gave us to understand, by words helped out by signs, that he was

* They approach within thirty miles of the coast, including the windings of the western channel.

the chief who interfered to stop the plunder of Sir John Franklin's party by his countrymen at Pillage Point. He likewise told us that it was his wives who, terrified by our sudden appearance, abandoned the oomiak, which was laden with reindeer meat. We presented our new friend with an axe, a knife, and several other articles, besides a liberal share of our repast. But, notwithstanding our generosity, he was immediately after detected in the act of concealing, in the breast of his dress, a knife and fork, having previously secreted a tin dish among the willows, where on a search it was discovered. He laughed at all this as a good joke; and, when we re-embarked, he did the same, declaring his resolution to accompany us, and protect us from his ill-disposed brethren at the mouth of the river. He persisted in his intention for some time, holding on by one of the boats, till the breeze freshening, and his canoe being almost run under, we cast him off. Even then so swiftly did he propel the light skin vessel with his broad two-bladed paddle, that we should scarcely have dropped him, had not a goose with her young brood upon the bank attracted his notice. We saw him no more. At 4 P. M. the Arctic Ocean burst into view. We saluted it with joyous cheers, and, immediately

landing, found ourselves at the bottom of Shoal-water Bay, the western point of Tent Island bearing N. 16° E. (true), distant about six miles. This then was that western channel which the Esquimaux messengers exhorted Sir John Franklin to ascend in August 1826, to escape the pursuit of the Mountain Indians. It is certainly preferable to the one he followed, as we nowhere found less than five feet water; and, steering straight out through the bay, there was a depth of fully three feet. Upon the point stood several old winter habitations of the Esquimaux; and, directing our glasses to Tent Island, we descried their summer camp. We halted for an hour, during which the variation 49° 22′ E. was obtained, the thermometer indicating 78°; and then stood out to sea.

CHAPTER V.

Voyage from Mackenzie River to Franklin's Return Reef.—Adventures among Esquimaux and Ice.—Discovery of the Franklin Mountains.

July 9th.—We had almost lost sight of Tent Island when we discovered several kayaks paddling swiftly after us. As the wind was now decreasing, the canoes, nineteen in number, soon came up with us. It required little encouragement to bring the Esquimaux alongside, when each man received a knife, a file, some rings, beads, and awls. They then became importunate to trade for their bows and arrows, darts, lip-ornaments, in fact, everything they had. We had no desire to enter into this kind of traffic; but, to quiet them, we traded for a few of those articles. One lively youngster attracted our notice by his activity in the noisy barter. He shot his arrows and lance repeatedly on the water, to shew us their excellence; at the same time shouting "Neittuke," and "Took-took"—the

seal, and reindeer. On receiving a hatchet and some other things for his weapons, he beat upon his breast, laughed, whooped, and capered in the utmost extravagance of animal joy. He was afterwards employed by several of his less adroit friends to exchange their goods. A fine-looking young man, whose face was not disfigured by the labrets, was remarkable for his modesty, but did not fare the worse on that account. There was only one old man of the party. They appeared to us a stout, well-looking people, with complexions considerably fairer than the Indian tribes. Having finished our transactions with them, and satisfied our curiosity, we told the strangers to return to their village; upon which they gave us to understand that they wished to accompany us to our encampment, and to spend the evening in our society. To this, however, we had a decided objection. Already had they made several unsuccessful attempts to pilfer out of the boats; fresh numbers would soon have joined them, stimulated by the remembrance of former success; and we had Escape Reef, and a shallow bad navigation, before us. We therefore peremptorily ordered them back, but to no purpose. Two or three guns were shewn, which alarmed them a little. They held up their hands deprecatingly, calling

out "Caw-caw!"—but persisted in following at a short distance, even after one or two blank shots, till I fired with ball over them; upon which they instantly ducked their heads, veered round, and, after paddling out of reach, halted to hold a consultation,—more canoes now appearing in the distance. Thus delivered, we continued our course under sail, with a light close wind, passing the reefs and shoals about four miles from the land; the weather dark and threatening. At 10 o'clock a violent squall took us, and it was with the utmost exertion that we were able to gain the shore at midnight.

The tide rose here about one foot on the morning of the 10th, bringing with it great numbers of methy *(lota maculosa)*, many of which we speared with the Esquimaux lances. Before we had time to take any rest, a heavy swell came rolling in upon the beach, and compelled us to look out for another harbour. After pulling for several hours along the steep mud-banks that form the coast-line, we reached Shingle Point, lying under the 69th parallel of latitude, and there erected our tents, for the first time, since our detention by wind at the head of Mackenzie River. A north-west gale had now commenced, and raged all day. We found at this place a number of winter huts, and of

graves covered with the implements used by the deceased. There was also the frame of an oomiak, twenty-four feet long; and a large sledge with side-rails, well mortised, and strongly knit with whalebone, so that our Canadians pronounced it made "comme à Montreal,"—the very superlative of commendation in their opinion.* We enjoyed a very cold bath in the sea. The musquitoes had now finally abandoned us, and there can be no stronger proof of the unusual severity of this season along the coast; for Franklin, Beechey, and Richardson complain of the attacks of these insects throughout their Arctic voyages.

The wind having abated, we started on the 11th at 3 A. M. To seaward there were some large icebergs in motion, but we proceeded without interruption till 11, when we landed to breakfast. A fog now enveloped every object, and already had the temperature fallen thirty degrees since issuing from the Mackenzie. We

* French vanity has lost nothing of its point in the New World. The largest sort of ducks in the interior are called "Canards de France;" English tan-leather shoes, "Souliers François;" the whites in general, "les François," as all Europeans of old were Franks; and one old guide, talking of the place whence the Company's merchandize came, took it for granted that it was from "la vieille France de Londres!"

soon came to the margin of the ice, which fortunately was afloat near the shore. We twisted and poled our way through it: the transparent masses exhibiting every variety of fantastic shapes,—altars, caverns, turrets, ships, crystal fabrics,—which changed as we gazed upon them; and often rolling over or breaking down, with a thundering noise, tossed our little boats on the swell caused by their fall. In the small open spaces, and on the floes, numberless seals were sporting; one of which would every now and then follow for a while in our wake, rising breast-high to gratify his curiosity, and then giving place to another. I wounded one of the largest size, but he escaped from us by getting within the close ice. Point Kay was doubled with much difficulty in the afternoon. Here we had the mortification to find farther progress impossible, for the ice blocked Phillips' Bay. Our fires were scarcely lighted when we perceived three Esquimaux approaching us along the reef. They halted at a little distance to reconnoitre, and then sat down, apparently afraid to advance. Upon our calling to them, they threw down their weapons, and approached us with perfect confidence. One of them then went away, and soon returned with the rest of the party, consisting of five women, two lads, and

several children. They seemed poor, but were lively in their demeanour, and, what recommended them still more to us, in no way troublesome or intrusive. Every individual, young and old, was gratified with a suitable present; and we afterwards purchased from them some fresh herring-salmon *(coregonus lucidus)*, and a bundle of whalebone. They left us late in the evening.

During the whole of the 12th it blew strongly from the northward, with a dense fog and cheerless weather. Our Esquimaux neighbours paid us another visit, and then took their departure, probably to inform their friends at Herschel Island of our appearance on the coast. Next day the ice was still more closely packed, and numerous masses were cast upon the beach. About noon the gale abated, the thermometer rose as high as 51°, and the latitude 69° 18′ 19″ was obtained; variation 49° East. We made excursions upon the green hills, which were embellished with the brilliant tints of innumerable flowers: specimens of these were gathered, and some water-fowl were shot. A row of marks was observed extending across the point, evidently designed to lead the reindeer to the edge of the steep bank; over which, pursued by one party of hunters, they dash into the sea, where they fall an easy prey to another party, stationed in

canoes below. There were also a number of old marmot snares set upon the slope, but none of those curious little animals were to be seen. The fog and cold returned in the evening, attended with a drizzling rain.

The morning of the 14th was calm, and we observed the first regular flow of the tide. At 8 o'clock it had risen eight inches, detaching the heavy field-ice to seaward from the broken ice in the bay, and opening a narrow passage to the opposite land, of which we immediately took advantage. It was, however, a work of labour and some danger to force our way through in many places, and it was noon before we reached Point Stokes. At a stream issuing out of a lake farther on, we found another small camp of Esquimaux, whose conduct was similar to that of the last party, and equally well rewarded. We procured from them some fine salmon-trout, taken in a seine of whalebone, which they dragged ashore by means of several slender poles spliced together to a great length. A tame full-grown seal was playing in the water around the tents, and, while we were there, came to the brink to be fed. We found the strait between Herschel Island and the mainland open. While passing through it, we were visited by three men, and two oomiaks filled with women and

children. They received the usual presents, and informed us that there were five more men of their party hunting reindeer on the island. At 9 P. M. we landed on its extreme western point, from whence the sea, except close in-shore, appeared quite covered with ice. Clouds obscured the sky, and encircled the mountain tops; but from the north-west a golden gleam shot down upon the icy horizon. On the beach were found some bones of an enormous whale, probably stranded here, of which the skull measured eight feet in breadth. Another oomiak, containing a man and his family, came to us shortly after we quitted the island. The evening was mild, with a gentle easterly breeze, before which we sailed all night, between the margin of the ice and the land.

At 10 in the forenoon of the 15th we halted to breakfast at Demarcation Point, where the lat. 69° 40′ 31″ N., and the variation 48° 23′ 10″ E., were observed. In the afternoon the breeze freshened, and we made rapid progress along and through the grounded ice; fragments of which, occasionally detaching themselves, plunged headlong into the sea with a noise rivalling the discharge of heavy artillery. Large flocks of white and brown ducks flew past us; many floes were covered with the noisy "cacawees;" while on

the plains between the British chain of mountains and Beaufort Bay browsed numerous herds of reindeer. Farther on stood a camp of Esquimaux, who, after shouting to us, pushed off in their kayaks; but the fast sailing of our boats, and our disinclination to sacrifice the favourable wind, prevented any communication with them. The weather was cold and dark, and heavy masses of clouds were hurrying rapidly towards the west. The mountains were almost hidden from view; but ever and anon their snow-capped summits glared portentously through the cloudy canopy, whose vagueness strangely magnified their height. We supped at Point Humphreys, and proceeded on till midnight, when our career was arrested, at some distance from land, by ice adhering to Point Griffin, and extending in every direction beyond the reach of vision. With considerable difficulty we reached the shore at 2 A.M. of the 16th, and encamped.

It was high-water at noon, the rise being nine and a half inches. This insignificant tide did us good service, in opening a lane along the shore, into which we immediately launched. It blew freshly from the east, and we ran among the ice at a great rate, keeping of course a sharp look-out in our bows. The narrow, crooked openings drew us out two miles to seaward, and at length

terminated abruptly, leaving us completely embayed in the ice, which was driving rapidly westward. Our only resource was to gain the land, which, after much shoving and cutting, we effected at 5 P. M., near Point Manning. The reef bore numerous recent foot-prints of Esquimaux, probably bound on their annual westward journey to Barter Island. We had in the course of the afternoon seen several people on the shore, but they did not venture off. The lofty peaks of the Romanzoff Mountains seemed to look scornfully down upon the little party that now sat at their humble evening meal. Finding a fine open space of water within the reef, we carried the boats and cargoes across it, and again set sail. Steering outside of Barter Island, we saw on its western extremity a single tent, the inmates of which were asleep; while a large dog stood sentinel, but let us pass without alarming his friends within. The wind increased as we stood across Camden Bay.

We sailed without material interruption till between 2 and 3 A. M. of the 17th, when a great pack of ice, stretching out to seaward, obliged us to put in near a considerable camp of the natives. These soon visited us, to the number of twenty men, and twice as many women, lads, and children. A place was assigned, and a fire made

for them, at the distance of fifty or sixty paces from our tents. A friendly communication was immediately opened, in which our vocabularies were summoned to play their part, to the great amazement of the savages, who declared that the books spoke to us. A valuable selection of presents was then distributed among them, consisting of axes, trenches, knives, files, and fire-steels, to the men; awls, needles, rings, beads, and scissors, to the women and children. We next traded for a number of pairs of their waterproof boots, sufficient for ourselves and the crews; likewise for a few of their lip ornaments, on which they set a high value, demanding a dagger or a hatchet for each pair. Those purchased by us were formed of very large blue beads, glued on to pieces of ivory. We did not observe that this kind of labret constituted any distinction of rank, as remarked by Captain Beechey. The rest were made of ivory only, and the boys wore them of a smaller size. Three of the men were remarkable for their good looks, and a stature of from five feet ten to six feet. We asked their names, and wrote them down as follows: Kenaweye-wāngha, Koowōknoo, Kooyouwok-chēna. Upon observing what we were about, all the men, and two or three of the old women, came forward to get their names similarly honoured; at the

same time inquiring and then repeating ours.* One of the Highlanders' Gaelic appellation, Eachin (i. e. Hector), happening to resemble some word in their own language, called forth bursts of merriment. At our request, they gave us a specimen of their dances, accompanied by a somewhat monotonous chorus; and we could not help admiring their activity in leaping from side to side, when imitating their manner of avoiding the weapons of their enemies. In return for this exhibition, four of our men danced a Scottish reel in very spirited style, with which the strangers were highly delighted. When the women and children and some of the men had withdrawn, the remainder were permitted to come to our fire, and to satiate their curiosity by examining the boats and the tents. This went on very well for a while, but indulgence rendered them troublesome; and one fellow, who had received an axe, seeing a bright tin bason at the tent-door, took a fancy to it, threw down his axe, snatched up the dish, and was making off with it, when he was seized by Mr. Dease, and, some of our people at the same moment shewing their arms, the Esquimaux retired with many protestations of good-will. We had only, how-

* The Indian, on the contrary, like Ossian's heroes, scorns to tell his name.

ever, enjoyed about two hours' repose, when they returned; but the check they had received seemed to have cemented our friendship. There were but few cases of ophthalmia among these people. Most of the women wore their hair in lofty top-knots, as described by Franklin; and they carried their infants between their reindeer-skin jackets and their naked backs. Some of them had light-coloured eyes and complexions, which, if cleansed from grease, might have passed for fair in most parts of Europe. It was high-water at 1 P. M., the rise of the tide being eleven inches. The weather, which had been very foggy since the preceding evening, now cleared a little; and, from an adjoining eminence, we fancied we could discern open water some distance to seaward. We made for it without delay, through a narrow lane extending outwards, and soon reached its termination. At the same time the ice closed rapidly upon us, before a strong north-east wind. We turned about, but it was too late. The boats were repeatedly squeezed; and mine, which was foremost, was only saved from entire destruction by throwing out everything it contained upon the floating masses. By means of portages made from one fragment to another,—the oars forming the perilous bridges,—and after repeated risks of boats, men, and baggage being separated

by the motion of the ice, we at length succeeded, with infinite labour, in collecting our whole equipage upon a small floe; which, being partially covered with water, formed a sort of wet-dock. There we hauled up our little vessels, and, momentarily liable as we were to be overwhelmed by the turning over of our icy support, trusted to a gracious Providence for the event. We were three miles from the land; the fog again settled round us, and the night was very inclement.

At 4 next morning, finding that the gale had abated, and the ice relaxed a little around our hazardous position, we pushed for a lane of water that appeared at a short distance to seaward. After a considerable circuit it fortunately led to the shore, about a league to the eastward of our former situation. There, at the foot of a green hill, near a stream, we encamped to await the chances of time and tide. The tracks of reindeer in the vicinity were innumerable. It was high-water at half-past 1, the tide having risen ten and a half inches. The evening was calm, with a dense fog and drizzling rain.

The 19th was dark and cold, the temperature at noon rising no higher than 39°. We were favoured with another visit from a party of our Esquimaux neighbours, apprized of our return by one of their hunters, who chanced to pass

near our camp. As a mark of confidence, they laid down their bows and arrows, and long Russian knives, as they approached us; but were with difficulty prevented from encroaching on a line of separation marked out upon the beach. At their earnest desire we purchased a few more articles from them. Their weapons are the same as those often described by other travellers: viz. two sorts of bows; arrows pointed with iron, flint, and bone, or blunt for birds; a dart with throwing-board for seals; a spear headed with iron or copper, the handle about six feet long; and formidable iron knives, equally adapted for throwing, cutting, or stabbing. Two irregular tides were this day observed: the first, of six inches, at 1 in the morning; the other, of eight, about 2 in the afternoon. In both cases the flow appeared to come from the westward. The weather cleared a little as it grew late; and, for the first time since we reached the coast, we had the pleasure of seeing the sun at midnight, about twice his own diameter above the horizon. His level rays glanced upon a watery space to seaward; and, hailing the glad prospect, we instantly embarked.

Favoured by a fresh easterly breeze, we rounded the icy pack at the distance of about four miles from the shore. The fog returned; but

we steered by compass for Flaxman Island, which we reached at 5 A. M. on the 20th. In crossing the mouth of Canning River, such was the strength of the current it emitted that the boat nearest the shore was turned almost round before the steersman had time to be on his guard. At the entrance of the bay which receives Staines' River we could distinguish through the haze a very large Esquimaux camp, being, in all probability, the western traders, on their way to meet the various parties we had passed. The ice was closely packed on the north side of Flaxman Island, but we passed unobserved by the natives through the channel that divides it from the mainland. Almost benumbed with cold, we landed to breakfast near Point Bullen. The weather again cleared up a little; and Mount Coplestone, the western termination of the Romanzoff chain, appeared through its robe of clouds. The ice became heavier as we advanced, obliging us to keep within the Lion and Reliance reefs; and at 1 P. M. it entirely arrested our progress in Foggy Island Bay. We had scarcely landed, and secured the boats, when a violent north-east gale commenced, overspreading the sky with lurid clouds, and tossing the icy masses like foam upon the waves. The atmosphere cleared in the evening, but it continued to

blow with great fury. An immense herd of reindeer had recently passed, and we saw fresh footprints of the natives in pursuit. The country is a grassy flat, interspersed with little lakes well stocked with wild fowl. As on the burning sands of Egypt, the mirage sometimes converted the whole plain into the semblance of one vast sheet of water. The portion of the Rocky Mountains visible from the coast does not terminate, as conjectured by Sir John Franklin, with the Romanzoff chain. After a brief interval, another chain commences, less lofty perhaps, but equally picturesque; which, in honour of the distinguished officer whose discoveries we were following up, we named the Franklin Range.

On the 21st the storm raged fiercely, but we bore with patience the detention on witnessing the havoc made among the landward ice. A few miles out to sea, a continuous white line proclaimed it still unbroken. The beach was strewed with sea-wrack, amongst which we picked up some pieces of delicate branched sponge. An incredible number of seals were seen on the shores of this bay.

The gale continued during the 22nd, but with less violence. The morning was darkened by fog, and it was bitterly cold. At 7 we stood out, under close-reefed sails, for Point Anxiety.

When we had neared it, by our reckoning, we found ourselves barred from the land by a broad stream of heavy ice, extending out to seaward, and lashed by a strong swell. The fog was so thick that we were in the danger ere we knew of it, and my boat was driven against the ice. With violent exertion she was fended off till the sails filled, and away she dashed upon the other tack. After a few hours' cruise and a thorough drenching we made the shore in the bottom of the bay, about three miles to the westward of our former position. At noon, the lat. 70° 9′ 48″ N., variation 45° E., were ascertained. The longitude, reduced from Foggy Island, was 147° 30′ W.

In the afternoon we enjoyed a distinct view of the Franklin Mountains, extending from S. E. to S.W. by S. (true), the central and highest peak bearing S. by E. about twenty miles distant. They were still partially covered with snow; and the whole range presents a precipitous front to the coast. The storm again increased during the evening, and the hardiest among us were glad to assume the warm dresses provided against a winter residence on the shores of the Polar Sea.

Sunday, 23rd.—The weather moderated as the morning advanced, and at 10 we once more set

sail for Point Anxiety. The ice again prevented our approaching it, and let us far to seaward, till, in passing Yarborough Inlet, the low coast was only visible from the mast-head, distant about six miles. The ice, to our great joy, then turned abruptly in towards Return Reef, which we reached at 9 in the evening. I may here mention that our early arrival at the point where our discoveries were to commence, is, under Providence, mainly attributable to our inflexible perseverance in *doubling* these great icy packs, any of which might have confined us a fortnight to the beach, had we chosen to wait for its dispersion, or even till its extent could have been ascertained. Our humble thanks were offered to the Omnipotent Being whose arm had guarded us thus far, and we fervently implored a continuance of His gracious protection. Some Esquimaux had been, not long before, engaged in plundering the eggs of the ducks hatching upon the reefs. After supper we resumed our route, and the regular survey began.

CHAPTER VI.

Discoveries on the Coast from Return Reef up to Boat Extreme.

July 24th.—We coasted along Gwydyr Bay, which proved less extensive than we supposed on entering it. The extreme lowness of the land on this part of the coast is very deceptive to the eye when viewed from any distance, and a highly refracting atmosphere increases the illusion. We applied the names of Point Back and Point Beechey to the projections agreeing nearest with the hummocks of land seen by Franklin. I must, however, remark that the bearings are different; and that Point Beechey, distant twelve miles* from Return Reef, is certainly invisible from thence in any state of the atmosphere. The whole bay is protected from the sea by a chain of gravel reefs, on the outside of which the ice lay hard aground. The

* All the coasting distances throughout the journal are given in geographical miles.

soundings within varied from a quarter to one fathom—a sufficient depth of water for such light craft as ours.

Opposite to Point Beechey, and at the distance of a mile to seaward, the gravel reefs are succeeded by a range of low islands, eight miles in length, to which we attached the name of the Rev. David T. Jones, the faithful and eloquent minister at Red River. From Point Milne we enjoyed a transient prospect of another magnificent mountain range, about fifty miles to the westward. In honour of the public-spirited Governor of the Hudson's Bay Company, this chain was called Pelly's Mountains. The coast from Point Beechey has a westerly trending, for twelve miles, to Point Berens, so named after one of the Company's Directors; which proved to be the commencement of a very extensive bay, the land from thence turning off to the south-west. Coasting along it for eight miles, the beach preserved the same low character, consisting of mud and gravel; the soundings nowhere exceeding seven or eight feet on a bottom of gravel and sand. At length, at 9 A. M., the water shoaled to from one to two feet, and, after seeking in vain for a deeper channel, we were obliged to stand out to sea. We, however, had the satisfaction of tracing the land to the bottom of the bay, into

which a very large river falls; for the water, even at the distance of three leagues to seaward, was perfectly fresh. We called it Colvile River, as a mark of our respect for Andrew Colvile, Esquire, of the Hudson's Bay Company. The wind now freshened, and with it came a dense cold fog that immediately concealed the land. We had great difficulty in extricating ourselves from the shallows formed by the alluvial deposits of the Colvile; and, after steering fourteen miles north and north-west, till we approached the edge of the ice, found only seven feet water. We then tacked, and steered south-west; in which direction a stretch of sixteen miles brought us near to, but not within view of, the shore. We followed along it for four miles, keeping close in among the shoals; the water still quite fresh. Tired of such tedious progress, and being utterly unable to distinguish the beach, though we reckoned it to be no more than half a mile distant, we again stood out, for seventeen miles, to the north and north-west; the greatest depth during this run being one and a half fathoms, and the water salt. The wind had now veered to the northward, driving the ice down upon us; we had not seen land since the morning, and were quite uncertain what direction it might take. We steered westward at a venture, and, after

sailing five miles, at length made the shore at midnight. It was with difficulty we found a landing-place on a large fragment of ice, upon which the boats were hauled up. Having fasted for twenty-five hours, and being moreover benumbed with cold, it will readily be believed that we eagerly set about collecting wood and making a fire to cook our supper, to which, of course, we did ample justice. In gratitude for these seasonable enjoyments, this spot was denominated Point Comfort. Most of the party had caught severe colds from the constant exposure and unhealthy fogs; and all would have been incapacitated for wading through the ice-cold water, had it not been for the seal-skin boots procured from the Esquimaux — an invaluable acquisition on such service. Tracks of deer, and of a man and dog, were fresh upon the beach.

During the whole of the 25th it blew strongly from the north-east; which being right a-head, with the flats around us, and a dense fog shrouding everything, we were unable to quit our position. That was now bleak and cheerless, the thermometer standing at the freezing point, and little or no wood to be found. I took advantage of a few glimpses of sunshine to obtain the lat. 70° 43′ N., long. 152° 14′ W., variation 43° 8½′ E. It was most satisfactory to find, that

in one extraordinary run we had thus made good three degrees, twenty-two minutes, of westing, or nearly half the distance between Return Reef and Point Barrow. I ought here to remark, that we were not provided by the Company with chronometers, but that the want was efficiently supplied by a very valuable watch, generously lent to the expedition by Chief Factor Smith. While in search of wood, a mile or two from the encampment, some of our people had another view of Pelly's Mountains, now south-east of us, and not more than twenty miles distant. The intervening country consists of plains clothed with very short grass and moss, the favourite pasture of the reindeer, of which some large herds were seen. The immediate coast-line is formed of frozen mud-banks, from ten to fifteen feet high. About a mile to the northward we discovered another splendid river, flowing from the south-west, and named it after Nicholas Garry, Esquire, whose name has long been associated with Arctic research.

It was high-water on the 26th at 6 in the morning; the wind having raised the tide about two feet, which enabled us safely to cross the shoals. The weather had become clear and intolerably cold. We found the mouth of the Garry one mile wide, and its banks thickly co-

vered with drift timber, evidently brought down by the stream. Though now full tide, the water tasted fresh for several miles. From thence the land trended north-east, for eight miles, to a small island, separated from the mainland by a channel too shallow for boats. This island appeared to be a favourite resort of the natives in the spring, for we found a spot where baidars had been built, and picked up an antler cut asunder with a saw. There is little question but these were some of the people whose camp we saw on the 20th near Flaxman Island. The lat. 70° 47′ 45″ N., long. 151° 55′ 30″ W., were here observed; and this remarkable point was named Cape Halkett, in compliment to one of the Company's Directors. It terminates the great bay, which, from Point Berens, is forty-three geographical, or fifty statute miles, in breadth. On this spacious basin, which receives the waters of two noble rivers, we conferred the name of Harrison Bay, in honour of the Deputy Governor of the Company, whose attention has long been sedulously directed to the moral and religious improvement of the natives of the Indian country. From Cape Halkett the coast resumes its westerly trending, and for fifteen miles presents to the eye nought but a succession of low banks of frozen mud. The substratum

consists of a yellow clay, thinly covered with vegetable soil, which nourishes short grass and a variety of mosses. Many reindeer were seen as we coasted along. These swift-footed creatures came to the bank in small herds, gazed at us for a moment, and then bounded out of sight. We could not spare time for the chase. The ice was very heavy all along this part of the coast, and but very recently detached from the beach. We made tolerable progress through the narrow and intricate channels, the soundings averaging one fathom, on a sandy bottom. After rounding a point, distinguished by the name of the Right Honourable Edward Ellice, the mud-banks are succeeded by gravel reefs; which, at a short distance, are intersected by the mouths of a considerable river, named after William Smith, Esquire, Secretary to the Hudson's Bay Company. For ten miles the external line is formed by these reefs, on which large mounds of mud and shingle have been raised by the tremendous pressure of the ice. Several shallow channels appeared within, but they were not navigable.

Point Pitt, the northernmost spot passed during this day's march, is situated in lat. 70° 53′, long. 152° 54′. A few miles on either side of it, we observed a stream of discoloured fresh water

rushing through the reefs, probably from a considerable lake, but the atmosphere was too hazy for ascertaining the fact. At the last of these streams the mud-banks recommenced. The water becoming much shallower, with numerous sunken masses of ice, we were obliged to stand out from the shore. A fog-bank, looking at first very like land, now came driving on us before a strong north-east wind. After sailing some distance to seaward, we found ourselves embayed in the ice; and, on wearing round, one of the rudders gave way. The weather was dark, stormy, and so cold that the boats were incrusted with ice. We, however, escaped from this dangerous situation without further damage; and after a hard tug at the oars, in the teeth of the wind, we effected a landing at midnight on one of the numerous blocks of ice adhering to the shore. The men had to search for wood a good way off, and while so employed fell in with a herd of deer; but, though our three best marksmen started in pursuit, they returned in the morning without success.

27th.—On examining the vicinity, we discovered a large reindeer pound, simply contrived with double rows of turf set up to represent men, and inclosing a space of ground lower than the rest. The inclosure was two miles broad at

the beach, and narrowed towards a lake of some extent, where the unsuspecting animals are surrounded and speared in the water. On the shore were the remains of an Esquimaux camp. The earth was impenetrably frozen at the depth of four inches, so that our tent-pegs could not be driven home. Even this miserable soil produced a few flowers, but nothing new to add to our collection; and, since entering on new ground, not a rock *in situ*, or even a boulder-stone, had yet been found. The point of our encampment was about twenty feet high; and across the deer-pound, at the distance of four miles, the land formed another point of equal elevation. These two points we named after Messrs. A. R. M'Leod and M. M'Pherson, two gentlemen to whose good offices the expedition is under great obligations. About noon we observed, with pleasure, the ice beginning to open, and at 2 discovered a narrow lane of water leading out from the land, and apparently turning again inwards a few miles farther on. It blew a cutting blast from the north-east, and the spray froze upon the oars and rigging. Yet were we now in the midst of the Dog-days, that pre-eminent season of sunshine and beauty in more favoured lands! Having made our way, with considerable risk, amongst the ice, for seven miles, we

reached a point, named after Richard Drew, Esquire, of the Hudson's Bay Company, where the land turned suddenly off at a right angle to the southward. We now found ourselves in a large and very shallow bay, which we had much pleasure in naming after our worthy friend Chief Factor Smith, to whose unwearied aid in preparing the expedition for sea we were so deeply indebted. Near the middle of this bay a concealed reef ran far out, upon which lay a stream of floating ice, lashed by the breakers. We were at the same time partially enveloped in fog, but after an hour of hazardous labour we forced our way through the narrowest part of the barrier. Though the boats received repeated concussions, and took in much water among the surf, we were delighted to find that, after baling, they continued perfectly tight. We now made the best of our way, north-west and north, through the flats, sailing, poling, or pulling, in the verge of the ice, as wind and water served. Though we kept a vigilant look-out, my boat struck its stem forcibly against a piece of ice, the shock starting the iron fastenings of the foremast thaft, fortunately without doing any other injury. Farther out in the bay the ice lay smooth and solid, as in the depth of a sunless winter. So unbroken was its appearance, that some among

the party longed for horses and carioles, to drive at once to Point Barrow! Upon the flat shore were seen countless herds of deer. At length, at midnight, as we drew near a sharp projecting point, the crews declared that it was covered with white tents; which, upon a closer approach, proved to be a cluster of tall icebergs, towering over the point on the northern side. A dense wet fog setting in, we encamped on the extremity of this well-defined point, which, as a testimony of sincere respect and regard for the able and indefatigable Governor of all the Company's territories, we named Cape George Simpson. It is situated in lat. 70° 59′ N., long. 154° 21′ W., and bore traces of Esquimaux.

High-water took place at 10 A.M. on the 28th, the rise of the tide being ten inches. It widened the narrow passage between the icebergs and the shore, and enabled us to double the cape; but we had only proceeded between two and three miles when our further progress was arrested by an impenetrable body of ice, extending, as we found in the course of the day, all along the coast. We were, therefore, compelled once more to encamp. The ground was spongy and wet; the fog had turned into sleet; and the few pieces of pine and poplar we collected were saturated with the salt-water. These uncomfortable cir

cumstances greatly aggravated the sore-throats and severe colds with which most of the party were afflicted. We had spared no pains to provide for the health of our people. Each boat's crew was furnished with a tent and oilcloth; and the men were strictly enjoined to carry with them to the sea a sufficiency of blankets and warm clothing to protect them even amidst the rigours of a Polar winter, which, happily, we were not doomed to sustain on this desolate and inhospitable coast.

The fog and cold continued next day. Numerous flocks of white-backed ducks flew near the shore, on their autumnal migration to the westward. A few of us took our station upon hummocks of ice, and shot above a hundred of these large birds. They formed an acceptable change of diet, being fat, and good eating, though rather oily. At various times we saw along the coast, but in comparatively small numbers, Canada, laughing, and Hutchin's* geese, large dun-coloured ducks, golden and red-breasted plovers, boatswains, gulls, northern divers, snow buntings, and ptarmigan. The claw of a middle-sized Polar bear was here picked up; likewise

* Called "braillards" by the voyageurs, from their complaining cry.

some small scattered pieces of light-coloured granite, blueish-green slate, and red sand-stone.

Sunday, 30th.—At mid-day the temperature rose as high as 46°, and the fog partially cleared off for about three hours. This interval was employed in astronomical observations, which placed our encampment in lat. 71° 1′ 44″ N., long. 154° 22′ 53″ W., variation 42° 36′ 18″ E. Little or no change was perceptible in the ice. Just at midnight the opaque misty veil was drawn aside, as if by magic, and revealed to view a party-coloured sky in the north, richly illuminated by the rays of the sun, now almost touching the horizon. The effect was as beautiful as novel to us; but it was evanescent, and only served to aggravate the deep and settled gloom which soon involved that bright vision and everything besides.

The ice appearing somewhat loosened on the morning of the 31st, we embarked at 9, and forced our way through the crowded masses for about two miles, with serious risk to the boats. In this sort of progress, to which we so frequently had recourse, it must be understood that, except the bowman or steersman, all the crew were out upon the ice, with poles, pushing aside and fending off the successive fragments. The advance thus effected was always slow, painful, and pre-

carious; and we considered ourselves particularly fortunate whenever we found a natural channel through the ice wide enough to admit our little boats. These narrow channels were generally very crooked; and, when carrying sail, it required the utmost tact on the part of the steersman, aided by the look-out in the bows, and men on either side standing ready with poles, to avoid the innumerable floating rocks—if I may use the expression—that endangered this intricate navigation. Again were we stopped, and compelled to encamp.

From the extreme coldness of the weather, and the interminable ice, the farther advance of our boats appeared hopeless. In four days we had only made good as many miles; and, in the event of a late return to the Mackenzie, we had every reason to apprehend being set fast in Bear Lake River, or, at least, at Fort Franklin, which would have been ruinous to our future plans. I therefore lost no time in imparting to Mr. Dease my desire of exploring the remainder of the coast to Point Barrow on foot. In order to secure the safe retreat of the party, he handsomely consented to remain with the boats; and, as Point Barrow was still distant only two degrees of longitude, ten or twelve days were considered sufficient for my return, making every allowance for

bays, inlets, and other irregularities of the coast. The men having, to their credit, unanimously volunteered to accompany me, I selected five, M'Kay, Taylor, Morrison, Felix, and Morin, who were directed to hold themselves in readiness the following morning.

CHAPTER VII.

Journey on foot, and in an Esquimaux canoe, to Point Barrow. — Conduct of the Natives.

August 1st. — My little party quitted Boat Extreme on foot at 8 A.M. Our provisions consisted of pemican and flour; besides which, each man carried his blanket, spare shoes, gun, and ammunition. A single kettle and a couple of axes sufficed for us all; and a few trinkets were added for the natives. I carried a sextant and artificial horizon; and one man was charged with a canvass canoe, stretched on its wooden frame, which proved not the least important part of our arrangements. The whole amounted to forty or fifty pounds per man — about a quarter of the weight carried by the voyageurs across the portages of the interior. The day was dark and dismal in the extreme, a cutting north wind bearing on its wings a fog that hid every object at the distance of a hundred yards. We were, therefore, under the necessity of closely following the coast-line,

which much increased the distance and fatigue. The land is very low, and intersected by innumerable salt creeks. In fording these we were constantly wet to the waist, and the water was dreadfully cold. We crossed a strong deep river, and a shallow inlet, half a mile broad, in our portable canoe, which transported us all at two trips. The former was subsequently ascertained by Sinclair, after whom I called it, to issue from a large brackish body of water about five miles from our ferry. The latter, to which I gave the name of our other guide, M'Kay, receives a stream at no great distance from where we crossed it, for its waters flowed gently towards the sea, and were nearly fresh. Our route was tortuous in the extreme, and we had ascended M'Kay's inlet for several miles before we could distinguish the opposite shore. We passed during the day many large Esquimaux sledges, exceedingly well put together, and stoutly shod with horn. These vehicles were, in all probability, left here by the people of the great camp at Staines' River, on their eastward journey, to be resumed on their return when winter sets in. We also saw innumerable tracks of reindeer, and the trail of two hunters. Several Canada geese, with their young brood, ran across our path, but I did not allow them to be fired at. The snow

geese (*anser hyperboreus*) do not appear to frequent this coast, being replaced by the large white-backed ducks already mentioned. The former retire, in the autumn, south and south-east, by Athabasca and Hudson's Bay; the latter direct their flight towards Behring's Strait. Having accomplished twenty miles at 7 P.M., we found a grassy plat, with a few pieces of wood. Little or none of that essential article had been seen during the day, this part of the coast being shut out from the action of the sea by a chain of reefs. Here then we encamped, half-congealed by the cold wet fog and wind, which incrusted our clothes with hoar-frost and ice, as in the severity of winter. Unfortunately, the spot where we halted was wet beneath the deceitful surface; and, being quite exposed to the weather, we passed a miserable night.

When our march was resumed next morning, the weather had sensibly improved. A dull rainbow spanned the wet fog, which soon cleared off, and we enjoyed some hours of pleasant sunshine. The land, which so far had led north-westerly, soon turned sharply off to S.S.W., forming an acute angle, well termed Point Tangent. The gravel reefs here separate from the muddy beach, and stretch, as I found on our return, in a direct line of eleven miles to Boat Extreme, enclosing

the singularly shaped bay, of which we had now completed the tedious circuit, and on which I conferred the appropriate title of Fatigue Bay. After turning Point Tangent, I obtained a meridian altitude of the sun, which determined the latitude to be 71° 9′ 45″ N.; longitude, by the reckoning, 154° 52′ W. We immediately after traversed an inlet, a quarter of a mile wide, in our portable canoe. On the bank three Arctic foxes were sporting, and allowed us to approach pretty near before they ran into their holes. We saw many tracks of reindeer, still pursued by the two hunters, who had very lately been successful, for we found the remains of a fire, beside which lay the head and antlers of a deer. After travelling about ten miles, and wading through many a salt creek, the waters of which were at the freezing temperature, the land, to our dismay, turned off to the eastward of south, and a boundless inlet lay before us. Almost at the same instant, to our inexpressible joy, we descried four Esquimaux tents, at no great distance, with figures running about. We immediately directed our steps towards them; but, on our approach, the women and children threw themselves into their canoes, and pushed off from the shore. I shouted "Kabloonan teyma Inueet," meaning, "We are white men, friendly to the Esquimaux;"

upon which glad news the whole party hurried ashore, and almost overpowered us with caresses. The men were absent, hunting, with the exception of one infirm individual, who, sitting under a reversed canoe, was tranquilly engaged in weaving a fine whalebone net. Being unable to make his escape with the rest, he was in an agony of fear; and, when I first went up to him, with impotent hand he made a thrust at me with his long knife. He was, however, soon convinced of our good intentions; and his first request was for tobacco, of which we found men, women, and even children inordinately fond. This taste they have, of course, acquired in their indirect intercourse with the Russians; for the Esquimaux we had last parted with were ignorant of the luxury. Our new friends forthwith brought us some fresh venison; and, concluding, not without reason, that we were very hungry, they presented, as a particular delicacy, a savoury dish of choice pieces steeped in seal-oil. Great was their surprise when we declined their favourite mess; and their curiosity in scrutinizing the dress, persons, and complexions of the first white men they had ever beheld, seemed insatiable. They shewed us, with evident satisfaction, their winter store of oil, secured in seal-skin bags buried in the frozen earth. Some of their reindeer robes, ivory dishes, and

other trifles were purchased; and I exchanged the tin pan, which constituted my whole table service, for a platter made out of a mammoth tusk! This relic of an antediluvian world contained my two daily messes of pemican throughout the remainder of the journey. It is seven inches long, four wide, and two deep; and is exactly similar to one figured by Captain Beechey at Escholtz Bay, only the handle is broken off. Confidence being now fully established, I told them that I required one of their oomiaks, or large family canoes, to take us two or three days' journey—or sleeps, as they term it—to the westward; after which we should return. These skin boats float in half a foot of water. No ice was visible from the tents; and, from the trending of the coast, it was more than doubtful that our journey could have been accomplished in any reasonable time on foot. They acceded to my demand, without a scruple. We selected the best of three oomiaks; obtained four of their slender oars, which they used as tent-poles, besides a couple of paddles; fitted the oars with lashings; and arranged our strange vessel so well that the ladies were in raptures, declaring us to be genuine Esquimaux, and not poor white men. Whilst my companions were thus employed, I procured, from the most intelligent of the wo-

men, a sketch of the inlet before us, and of the coast to the westward, as far as her knowledge extended. She represented the inlet as very deep; that they make many encampments in travelling round it; but that it receives no river. She also drew a bay of some size to the westward; and the old man added a long and very narrow projection, covered with tents, which I could not doubt to mean Point Barrow. The first and only rock seen in the whole extent of our discoveries—an angular mass of dark-coloured granite—lay off the point without the tents. We were just embarking when the hunters arrived. After exchanging a brief greeting, we gave each a piece of tobacco, distributed some rings and beads among the women and children, and took our departure. Scarcely had we left the shore when a strong north-east wind sprung up from seaward, bringing back the cold dense fog. We could not see a hundred yards ahead, but steered due west, by compass, across the inlet, which at this narrowest part proved to be five miles wide. I had much gratification in naming it Dease Inlet, as a mark of true esteem for my worthy colleague. The waves ran high on the passage, but our new craft surmounted them with wonderful buoyancy. The coast we attained was from ten to fifteen feet high, and the ground was

solidly frozen within two inches of the surface. Not a morsel of drift wood was to be found in this land of desolation; but we followed the example of the natives, and made our tiny fire of the roots of the dwarf willow, between three upright pieces of turf. Our oomiak turned to windward, and propped up with the paddles, formed a good shelter; and under it we stowed ourselves snugly away for the night.

The weather clearing a little, we set off at 8 A.M. on the 3rd. We found the ice close-jammed along the shore, which ran out for five miles to the northward. The wind blew bitterly from the east; and, as we had to weather the pack, we were exposed to a heavy breaking swell, which soon drenched us to the skin, and, notwithstanding the admirable qualities of our boat, half filled it with water. Halting to bale out the intrusive element in the lee of a mass of ice, we found, to our surprise, that the muddy bottom was still impenetrably frozen. We breakfasted at the northern point of land, on a gravel reef, where some drift wood had been washed up. Here I obtained an observation, placing us in lat. 71° 12′ 36″ N.; long., by account, 155° 18′ W. It afforded me unfeigned pleasure to call this point after Chief Factor Christie, a warm personal friend, and also a zealous promoter of the interests of the expe-

dition. Lofty icebergs appeared to seaward; dark-coloured seals were sporting among the masses in-shore; and one of those gelatinous substances called by sailors "sea-blubber" was, for the first time, seen floating in Dease Inlet. From Point Christie the low coast, consisting of mud and sand, with a facing of ice, again turns westward for eight miles. We proceeded through the shallow openings between the detached ice and the shore, passing Point Charles and Point Rowand, and crossing Ross Bay, so named in compliment to three valued friends, partners in the fur trade. A dense fog again enshrouded us; and, on doubling Point Rowand, an opening, of which we could not discover the extent, led away to the southward. I therefore put ashore at 5 P. M. to sup, and examine the country. The soil consisted of hard dry clay, bearing patches of very short grass, and imbedding some splinters of granite, slate, and sand-stone. Of these I gathered specimens; but they were unluckily lost, together with a collection of pebbles from Point Barrow, through the ignorance of my men in emptying the canoe on our return. In about two hours a bright opening appeared in the east, which speedily extended athwart the heavens; and at length the sun shone out with cheerful radiance, dispelling the detestable fogs,

and restoring us to the light of day. I now discovered that we were in the mouth of a semicircular bay, four miles in diameter, which I named after Chief Factor Roderick Mackenzie. It was soon traversed; and its depth midway was found to be one and a half fathoms, on a sandy bottom. The coast then trended W.N.W., exhibiting a dismal succession of frozen mud-banks, varying from ten to fifteen feet high. We had not gone far when we came to a compact body of ice, extending beyond the reach of vision. Carrying our light vessel across a corner of this barrier, we pursued our way through the little channels between it and the shore. It was now calm; the ducks flew westward in immensely long files, and young ice had formed on every open space,—a timely warning to travellers who adventure far into these regions of frost. But we were fast approaching the goal that was to crown our enterprise, and disregarded all impediments. Seven miles beyond Point Scott we crossed the mouth of a fine deep river, a quarter of a mile wide, which I called the Bellevue. Landing beyond it I saw, with indescribable emotions, *Point Barrow*, stretching out to the northward, and enclosing Elson Bay, near the bottom of which we now were.

The sun was just reappearing, a little before

1 in the morning of the 4th, when this joyful sight met my eyes. His early rays decked the clouds in splendour as I poured forth my grateful orisons to the Father of Light, who had guided our steps securely through every difficulty and danger. We had now only to pass Elson Bay, which is for the most part shallow. It was covered with a tough coat of young ice, through which we broke a passage; and then forced our way amid a heavy pack, nearly half a mile broad, that rested upon the shore. On reaching it, and seeing the ocean spreading far and wide to the south-west, we unfurled our flag, and with three enthusiastic cheers took possession of our discoveries in his Majesty's name.

Point Barrow is a long low spit, composed of gravel and coarse sand, forced up by the pressure of the ice into numerous mounds, that, viewed from a distance, might be mistaken for gigantic boulders. At the spot where we landed it is only a quarter of a mile across, but is considerably wider towards its termination, where it subsides into a reef running for some distance in an easterly direction, and partly covered by the sea. One of the first objects that presented itself, on looking around, was an immense cemetery. There the miserable remnants of humanity lay on the ground, in the seal-skin dresses

worn while alive. A few were covered with an old sledge or some pieces of wood, but far the greater number were entirely exposed to the voracity of dogs and wild animals. The bodies here lay with the heads turned north-east, towards the extremity of the point; and many of them appeared so fresh, that my followers caught the alarm that the cholera or some other dire disease was raging among the Esquimaux. We had landed half-way between a winter village and a summer camp of these people, situated about three miles asunder; and, as it was very early in the morning, they were, perhaps, roused from their slumbers by our shouts when the British standard was first planted on their shores. It will be remembered by those conversant in northern voyages, that, in August 1826, Mr. Elson, who commanded the Blossom's barge, judged it imprudent, from the hostile demeanour of the natives, to land on this point, and that his observations were taken on an iceberg near the shore. On the present occasion, whether from astonishment or suspicion, none of the Esquimaux ventured towards us. Trusting to the superiority of our arms, and the effect of a frank and confident bearing, I resolved to anticipate the meeting. The yourls near the extremity of the point appeared very numerous, but I could not, through

the hazy atmosphere, discover whether they were inhabited; I therefore proceeded towards the tents on the other side, leaving a sentinel at our canoe, with orders to suffer no one to approach it. To prevent surprise, we marched along the highest shingle ridge; and, on drawing near the tents, could see the men, armed with bows and arrows, conceal themselves behind the mounds already described. As soon as we got within hearing, I stepped forward, and called out that our visit was a friendly one; upon which our antagonists immediately started up, and advanced to meet us with loud acclamations. We were not, however, either upon this or any other occasion, favoured with the kooniks or nose-rubbing salutations, that have so annoyed other travellers. The women and children now issued from their tents, and a brisk traffic opened; but, as I felt anxious about our canoe, I signified my intention of immediately returning to the landing-place. The whole party accompanied us; their patriarch headed the grotesque procession, carrying our flag upon a long fish-spear; and every article we had purchased found a willing bearer. We had scarcely established a boundary line on the beach, when the inhabitants of the other village, who had been watching our motions, swelled the throng, and welcomed us with an equal show of

pleasure. I explained how we happened to be in possession of a vessel so familiar to them; and I believe that its evident emptiness rendered them much less troublesome than they would have been had our riches appeared greater. All were eager to trade; and we were soon loaded with seal-skin boots, kamleikas, or water-proof shirts,* weapons, and gimcracks, some of which had figures of marine animals rudely carved in ivory. But what most attracted our curiosity was an ingenious and novel contrivance for capturing wild fowl. It consists of six or eight small perforated ivory balls, attached separately to cords of sinew three feet long; the ends of which being tied together, an expanding or radiating sling is thus framed, which, dexterously thrown at the birds as they fly past, entangles and brings them to the ground. During our stay we repeatedly saw these simple inventions effectively used. I likewise remarked some ponds on the point, set round with whalebone nooses, to ensnare the fowl when they come to peck the fine gravel carefully exposed to attract them. The grand article in demand here was tobacco, which, as in Dease Inlet, they call tawāc, or tawācah, a name acquired of course from the Russian traders. Not content with chewing and smoking it, they

* Made of the entrails of seals, &c.

swallowed the fumes till they became sick, and seemed to revel in a momentary intoxication. Beads, rings, buttons, fire-steels, everything we had, were regarded as inferior to tobacco, a single inch of which was an acceptable equivalent for the most valuable article they possessed. When in the course of this barter some of the younger people became forward and troublesome, the seniors more than once restrained them; using an expression which, to our ears, sounded exactly like the French words "C'est assez," and which, like tawāc, they may also have borrowed from the Russians. Meanwhile the old flag-bearer, whom my fellows nicknamed Mallette, paraded a roll of raw meat, fashioned like a huge sausage, severing therefrom sundry slices, or rather junks, which he imparted most liberally to every one who chose to partake of his good cheer. The whole band were well clothed in seal and reindeer skins. All the men wore labrets, and the tonsure on the crown of the head was universal among both men and boys. The women had their chins tattooed, but did not display the preposterous topknots of hair so fashionable to the eastward. There was nothing else, either in their manners or habits, remarked as differing from the well-known characteristics of the tribe. I could not learn whether there had been any

unusual mortality among them, and am of opinion that the concourse of natives who inhabit Point Barrow at all seasons, together with the frigid climate, sufficiently accounts for the number and appearance of the remains already noticed. When the means of buyers and sellers were at length exhausted, some of the women and girls ranged themselves in a circle, to gratify us with an exhibition of their national dances. Each of the damsels successively figured in the midst; while the remainder, joining hands, danced round her and sung in unison, some of their airs being by no means unmusical. The lady in the centre who performed most extravagantly elicited the highest applause; and one bold dame imitated, with great success, the violent gestures of the men when encountering their enemies, or when engaged in mortal combat with the monsters of the deep. As they waxed warm in this exercise, the whole of the fair dancers doffed their upper garments, retaining only their deer-skin breeches, and thus disencumbered these land mermaids renewed their amusement. While all were thus pleasantly occupied, I walked across the point, to obtain the requisite bearings. The day was unusually fine. To the northward a multitude of icebergs covered the ocean, in the east nothing but ice was

visible, but on the western side a broad lane of water stretched away towards Cape Smyth. So inviting was the prospect in that direction, that I would not have hesitated a moment to prosecute the voyage to Behring's Strait, and the Russian settlements, in my skin canoe. I could scarcely, in fact, suppress an indefinite feeling of regret that all was already done.

That eloquent and philosophical historian, Doctor Robertson, has all but demonstrated that America was first peopled from Asia by Behring's Strait. The Esquimaux inhabiting all the Arctic shores of America have doubtless originally spread from Greenland, which was peopled from northern Europe; but their neighbours, the Loucheux of Mackenzie River, have a clear tradition that their ancestors migrated from the westward, and crossed an arm of the sea. The language of the latter is entirely different from that of the other known tribes who possess the vast region to the northward of a line drawn from Churchill, on Hudson's Bay, across the Rocky Mountains, to New Caledonia. These, comprehending the Chipewyans, the Copper Indians, the Beaver Indians of Peace River, the Dog-ribs and Hare Indians of Mackenzie River and Great Bear Lake, the Thœcanies, Nahanies, and Dahadinnehs of the Mountains, and the

Carriers of New Caeldonia, all speak dialects of the same original tongue. Next to them succeed the Crees, speaking another distinct language, and occupying another great section of the continent, extending from Lesser Slave Lake through the woody country on the north side of the Saskatchewan River, by Lake Winipeg to York Factory, and from thence round the shores of Hudson and James bays. South of the fiftieth parallel, the circles of affinity contract, but are still easily traced. The Carriers of New Caledonia, like the people of Hindostan, used till lately to burn their dead; a ceremony in which the widow of the deceased, though not sacrificed as in the latter country, was compelled to continue beating with her hands upon the breast of the corpse while it slowly consumed on the funeral pile, in which cruel duty she was often severely scorched.*

My old banner-man informed me that whales were, in some seasons, seen without the point,

* Instead of being burnt, the New Caledonian widow (till the custom was abolished by the Company) was obliged to serve, as a slave, the relatives of her deceased husband for a term of one, two, or three years, during which she wore round her neck a small bag containing part of the bones or ashes of her former husband: at the end of the allotted term a feast was made, and she was declared at liberty to cast off her weeds and wed again.

and troops of seals were now sporting amongst the ice. The Esquimaux of Point Barrow have unquestionably an indirect trade with the Russians, whom they call "Noonatagmun." The old man readily took charge of, and promised to convey, a letter which I addressed to them, or to any other whites on the western coast, containing a brief notice of the success of the expedition; and I made him a small present to confirm his seeming good-will. We had no other means of marking our visit, the coast being destitute of wood or stone for the construction of a pillar on the shifting gravel; not to mention the inutility, perhaps danger, of the attempt, in the presence of more than a hundred savages, whose apparent friendship was, I believe, greatly owing to our being never off our guard. The configuration of Point Barrow afforded me a decisive opportunity of ascertaining the direction of the flood and ebb tides. Both were equally strong: the former coming from the south-west, and sweeping round the point; the latter retiring in the reverse direction. When we arrived, the morning tide had just turned, and the fall was fourteen inches. The moon being then three days old, the time of high-water at full and change will be noon. The afternoon tide was still rising when we took our

departure at 1 P.M., and I could not help remarking that the velocity of both ebb and flow was far greater than the inconsiderable rise and fall would have led me to expect. I likewise obtained astronomical observations, which determine the position of our landing-place to be 71° 23′ 33″ north lat., 156° 20′ 0″ west long. Our Esquimaux friends assisted in gathering some chips of wood to cook our breakfast, and stood amazed at seeing me light a piece of touch-wood with a burning-glass. Their own clumsy method of producing fire is by friction, with two pieces of dry wood in the manner of a drill. They seemed astonished when I used the sextant, but their wonder changed into terror on my applying the watch to their ears. They certainly took it for a "tornga," or familiar spirit, holding some sort of mysterious communication with my "speaking book." They were very solicitous for a few grains of shot, which they suspended round their necks as an amulet; and they held our fire-arms in great respect. We were nevertheless obliged to keep a strict watch over our things; and, when about to embark, our paddles were missing. As these implements were essential to us, and could be of little value to the thieves, I insisted upon their being restored. After some hesitation, one of the men, stepping

aside, laughingly dug them out of the sand; and we bade them farewell. No sooner had we pushed off, than the men crowded together, as if to hold a consultation. Their countenances grew dark; and they called out to us to keep along shore, towards the extremity of the point. This could only have been intended to deceive, for we were at the very narrowest part of the icy bar, where alone it was practicable to reach open water. We therefore disregarded their insidious advice, recollecting the warning of the Loucheux; and, if evil was meant, were soon out of their power. With great labour, and some damage to our canoe, we forced our way again through and over the heavy pack of ice, which had considerably increased in breadth. Then, recrossing Elson Bay, we continued on through the narrow channels leading along the shore, till, on rounding Point Rose, the ice became so closely locked that farther progress was impossible, and we encamped to enjoy some rest, having had none the previous night. The evening was calm and fine, but new ice formed on the beach.

5th.—An easterly wind most seasonably loosened the pack of ice this morning; and, taking an early breakfast, we re-embarked. The day was clear and serene; and I took advantage of it, as we coasted back, to correct the bearings of the

land, which had been obscured by fog on the outward journey. The reindeer seemed animated by the unwonted fineness of the weather, and were grazing in great numbers near the shore. In Dease Inlet three noble bucks stood so nigh the bank, that I landed with Taylor to get a shot. The deer could not see us; but we had not crawled far towards them, when, warned by their acute sense of smell, they tossed up their antlers, whose tips guided our approach, and started off as if impelled by wings across the plain. The ebbing tide ran strongly out of the inlet as we traversed it in the evening. The depth midway was two fathoms, on a bottom of mud. Our Esquimaux friends seemed overjoyed at our return, and would fain have detained us all night: but, not choosing to lose the fine weather, I told them we must be off immediately; and, as we still stood in need of their valuable canoe, I invited some of the men to accompany us to Boat Extreme, where they should be liberally recompensed. Four of them accordingly embarked in their kayaks; of whose speed, with their mode of shooting their arrows and darting their lances, they gave us an ample exhibition. We ourselves struck up some French and Highland boat-songs, which probably for the first time resounded from an Esquimaux

baidar, and undoubtedly for the first time assailed the ears of our auditory. These evinced their love of harmony, indifferent as it was, by instantly relinquishing their sports, bending their heads down to the water, and beating on their breasts, whilst their little sparkling eyes shewed the gratification they felt. The Loucheux possess the same sensibility, and have often entreated Mr. Dease to entertain them with his violin. The morose Chipewyans, on the other hand, seemed almost devoid of this taste, and their only attempts at singing are borrowed from the Crees. We landed for supper beside a brook of fresh water; a very unfrequent object on this frozen, mud-walled coast, where our drink was usually drawn from the icebergs. Our savage companions were in high spirits, and repeated to me a number of their words, most of which correspond with those given in the journal of Sir Edward Parry's second voyage, or vary only in the termination; but a few are entirely different. The sun set at a quarter to 11.

Sunday, 6th.—Our route was resumed a few minutes after midnight, much against the inclination of the Esquimaux, who wanted to sleep. At Point Tangent we found two other lodges, which had sprung up since we passed on foot. The inmates had evidently been at our boats,

for they wore some of our cast-away moccassins. Our escort here declined going any farther, and demanded an axe for their canoe, the very price paid for one by Mr. Elson on the other side of Point Barrow. I immediately gave them one of our axes, together with all the tobacco we had left; and my bowman was in the act of shoving off, when the strangers, nine in number, seized the canoe, with the intention of dragging it ashore. On my pointing my gun at them they desisted; but quick as thought they snatched their bows and quivers, expecting to take us by surprise. When, however, they saw the whole crew ready for the combat, they lowered their tone of defiance; and I remarked with a smile, that, as sometimes happens in more civilized communities, the most blustering, turbulent fellow was the first to shew the white feather. The rascal's copper physiognomy fairly blanched, and his trembling hand refused to lay the "cloth-yard shaft" to the bowstring, as the others had done. When the threatened fray was blown over, I explained, as well I could, to the aggressors, that the visit and intentions of the whites were altogether friendly; but we parted in mutual distrust. We followed the outside of the reefs enclosing Fatigue Bay. They are intersected by several broad deep channels, that

allow egress to the waters of the rivers and creeks crossed on our outward journey. The tide being in, we found a sufficient passage for our small vessel between the reefs and the heavy ice. The morning was bright and lovely, and the rapid dash of our light oars proved that we felt its exhilarating influence. At 5 A.M. we aroused our still slumbering comrades at Boat Extreme, and received their warm congratulations on the early and successful termination of our discoveries. I now learned from Mr. Dease that the natives at the last tents had left him two days before; and, on departing, had helped themselves to some silver tea-spoons, and one or two other articles, out of his travelling-case, while he lay asleep in his tent. Their dread of pursuit or punishment must therefore have been the cause of their dissuading our four companions from proceeding farther, and of their united attempt upon our canoe, which so nearly led to a fatal conflict. This was the only successful theft that occurred on the whole voyage. Mr. Dease had observed a pretty regular semi-diurnal tide, which rose on an average fifteen inches, and came along the reefs from the *north*-west. This coincides with my own remarks at Point Barrow, except that there the tide flows from the *south*-west, because such is the trending of

the land to Behring's Straits. There can, therefore, remain no doubt that this western part of the Arctic Sea receives its tides from the Pacific. I obtained astronomical observations, placing Boat Extreme in lat. 71° 3′ 24″ N., long. 154° 26′ 30″ W.; and it gave me peculiar pleasure to find that, since the 30th July, notwithstanding all the walking and exposure, my excellent watch had altered only one and a half seconds from mean time. As we no longer required the canoe, which had rendered us such inestimable service, it was laid up securely on the beach for its former owners, who, we were certain, would before long repair to our deserted encampment.

CHAPTER VIII.

Return of the Expedition from Boat Extreme to the Mackenzie.—Ascent of that river.—Boisterous passage of Great Bear Lake.—Arrival at Winter-quarters.

August 6.—SHORTLY after noon, the expedition, now happily reunited, commenced its return to Mackenzie River. Being favoured by a light wind, and a comparatively clear sea, we steered straight across Smith Bay. In Boat Creek, behind Point M'Pherson, which we entered to sup, we found abundance of drift wood and traces of Esquimaux. Re-embarking, we continued our course all night, under easy sail, along the land.

At 11 next day we reached Cape Halkett, where we breakfasted, and halted for some time. The weather was unsettled, and several smart showers of rain fell. The wind was light, and now right ahead for crossing Harrison Bay, which, however, we resolved to attempt. After proceeding eleven miles in a direct course for Point Berens, the rapid driving of the clouds seemed to indicate an approaching gale off the

land. We were at this time "spelling it," as voyageurs say, under the lee of an iceberg close to the great body of the ice. The depth here was three fathoms, on sand; being the greatest met with in the whole range of our western discoveries. To avoid the risk of being blown too far out, we shaped our course more into the bay, and had scarcely got sight of the land, whose continuity I was now fully able to trace, when a westerly gale sprang up, before which we ran all night under close-reefed sails. The boats shipped a great deal of water, particularly in crossing the flats off Colvile River, but proved themselves worthy of our good opinion; and, drenched and shivering though we were, all hands were overjoyed in the prospect of a rapid return. I must not omit to mention, that, during this stormy run, we fell in with a small island, about a league from the main shore, and not seen on the outward voyage. On landing upon it, we found numerous vestiges of Esquimaux, and a quantity of drift wood brought down by the Colvile, from which it is twelve miles distant. The water between Esquimaux Island, as it was called, and the mainland, was fresh. The actual mouth of the Colvile appeared fully two miles wide; and with such force does its powerful stream issue, that Mr. Dease's boat, in crossing it, four miles

out in the bay, became almost unmanageable. From these circumstances, and its relative position to Return Reef, it is evident that this is the opening described to Augustus, Sir John Franklin's interpreter, by his countrymen in 1826, and of which Franklin himself remarks, "I am inclined to think that it is the estuary of a large river, flowing to the west of the Rocky Mountains, obstructed by sandbanks, like the mouth of the Mackenzie." This is another proof of the accurate information to be obtained from the Esquimaux; and we could only regret that we were precluded, by the want of an interpreter, from acquiring some knowledge of the internal communication between Harrison Bay and Cook's Inlet, which the Colvile probably affords.

The party with whom we spent some time in Camden Bay were in possession of *iron* kettles, which they said they procured from the westward for two skins of the wolverene or glutton. Captain Beechey's officers saw only *copper* kettles beyond Point Barrow, where the trade is probably conducted in a different manner. The Colvile separates the Franklin and Pelly Mountains, the last seen by us; and probably flows in a long course through a rich fur country, and unknown tribes, on the west side of the grand Rocky Mountain chain, the melting of whose accumu-

lated snows causes the extraordinary increase and agitation of the waters spoken of by the Esquimaux. It was a subject of unavailing regret that the great distance of our wintering ground rendered it impossible to spare a few days for the examination of this interesting and magnificent stream. Mr. Robert Campbell has been lately employed by the Company — as successor to that enterprising traveller, Chief Trader John M'Leod,—to establish a post among the stupendous fastnesses of the Rocky Mountains, on the sources of the impetuous Liard River, in lat. 57° or 58°, and to explore the streams flowing thence towards the Pacific. This young and active traveller met, on the banks of a river called the Stikine, discovered by his predecessor in 1834, a great concourse of Nahanie Indians assembled round a party of Russians. The latter ascend the river in boats to a cataract far within the British lines, at the foot of which there is a splendid salmon fishery. There were a number of men, commanded by four ragged, drunken officers, who spoke a few broken words of English. Campbell afterwards received accounts from the natives of a much larger river, that also takes its rise on the west side of the mountains in a great lake to the northward of the Stikine. From the description I sent him of the Colvile,

he thinks that it must be the same; an opinion which corroborates my own preconceived ideas. Should this conjecture prove correct, this river traverses, in its course to the Frozen Ocean, about twenty degrees of longitude and more than twelve of latitude; and the distance of its mouth from its source exceeds one thousand English miles.*

After clearing Harrison Bay, the violence of the gale increased. Under treble-reefed sails, and

* Subsequently to this (in April 1839), Campbell's post was plundered and destroyed by a band of about a hundred Nahanies, who, painted in the most horrid manner, and uttering frightful yells, fired into the houses, and would have instantly massacred Campbell and his comrades, already greatly reduced by starvation, had not the grand chieftainess interposed to save their lives; but, with a refinement in ferocity, these savages would not permit a few friendly Indians to relieve their famine. Three men perished; and, after incredible sufferings, Campbell, with the few survivors, escaped to Fort Halkett, several hundred miles down the river. An arrangement entered into by Governor Simpson with Baron Wrangel, to lease the whole Russian line of American coast as far north as Cape Spencer, will, it is to be hoped, prevent a repetition of such dreadful scenes as the above, which there is too much reason to suspect was instigated by the jealousy of the Russian traders on the Stikine. All the principal men among the Nahanies have a number of slaves, who act as beasts of burden, and are treated by their inhuman masters in the most brutal manner. The new arrangement will, I have no doubt, effect a gradual improvement in the condition of these unhappy beings.

protected by Jones Islands, our little vessels flew through the foaming waves, which often broke over them from stem to stern. At 3 P. M. on the 8th we saw Return Reef, and ran safely into a cove scooped out by a small river in the contiguous mainland. The wind shifted to the northwest, and blew intensely cold. A large herd of deer appeared in the vicinity of our encampment, and one of our half-breed lads, enveloped in a deer-skin robe, approached close to them, but from over-eagerness missed his mark. In the evening a little fawn came to the tents, and was suffered to retreat unmolested; an incident that furnished a name for the streamlet.

9th.—With the morning the weather mitigated, the sun shone out, and the cargoes were exposed to dry. Some good observations were obtained, which placed Fawn River in lat. 70° 25′ 3″ N., long. 148° 24′ 45″ W. Return Reef bore E. N. E. about two miles distant. From this it would appear that my latitude agrees exactly with Sir John Franklin's, but that the longitude is about half a degree or ten miles more to the east; a difference for which I am at a loss to account, as the longitudes of my extreme points of comparison—Tent Island, at the mouth of the Mackenzie, and Point Barrow,—perfectly correspond with the prior determinations of Franklin and

Elson. We resumed our route early in the afternoon; and, it having fallen nearly calm, we made slow progress compared with yesterday's boisterous career. The reefs were denuded of the ice from which we had incurred so many risks before; and the water on the shallows was but slightly brackish, in consequence either of the melting of so large a body of ice, or, what is more probable, from the influx of a river of some magnitude in Yarborough Inlet. At a quarter to 10, just as the sun was sinking below the horizon, we landed near Point Anxiety. Numerous boulders of granite strewed the beach. On the level of the plain the ground was rent into enormous fissures by the frost, and large portions of the banks seemed to be constantly falling into the sea and adding to the shallows. Two large buck deer galloped past us, looking in the twilight, with their huge antlers, like goblin huntsmen on horseback. A westerly breeze opportunely springing up, we set our sails, and pursued our voyage all night.

10th.—The wind increased, and we ran along rapidly; passing outside the Lion and Reliance Reefs, and inside of Flaxman Island, where we again encountered the ice. At 11 we landed to breakfast on a reef opposite Mount Coplestone, where the lat. 70° 9′ 8″ was observed.

The Romanzoff Mountains were visible in all their grandeur, the loftier peaks being freshly wrapped in snow. We next shaped our course across Camden Bay, steering among the ice under reefed foresails only, till we had passed the scene of our former adventures, when, finding a clearer sea, we set the mainsails, and scudded along at the rate of seven knots an hour. The wind still augmented, a sprinkling of snow fell, and it was bitterly cold. The setting sun glared through angry clouds as we landed on Barter Island, where we regaled ourselves before immense fires of drift timber. Before midnight we re-embarked, and, steering within the reefs for some time, enjoyed a smooth run.

We had no sooner lost the shelter of the reefs than we became exposed to a huge rolling sea, and, as we shot from the crests of the waves into the trough beneath, the gallant little consorts fairly lost sight of each other, till they rose again bounding over the billows.

At 7 in the morning of the 11th we reached Beaufort Bay, where we regained the protection of the seaward ice. It was piercingly cold; the water froze in the kegs; several light snow-showers fell, and the British range of mountains had assumed the livery of another winter. We passed a small camp of Esquimaux without no-

ticing the signals they made us from the tops of their wooden huts; but, while at breakfast at Demarcation Point, five of the men joined us. After advancing about two hours longer, a heavy body of ice, which came driving eastward with great velocity, made us seek the shore and encamp. I strolled for several miles upon the grassy plains stretching to the base of the mountains, but saw no objects of natural history worth collecting, except some great snowy owls, that, perched with half-closed eyes upon little knolls, were too wary to allow of my approach within gunshot. After some time, the men we had seen at Demarcation Point, and several others, among whom were our handsome acquaintances of Camden Bay, arrived with their families, and, pitching their tents near us, pestered us as usual with their trade. We learned from them that they had concluded their barter with the Western Esquimaux and Mountain Indians; and they shewed us the iron kettles, knives, and other things obtained through these channels from the distant Kabloonan, or white men. They knew at once that we had been among the far west Esquimaux from the boots we wore, which were of a wider and clumsier shape than their own. It is easy to account for not meeting on our return with the people of the large camp

in Staines' River, as we travelled during the night, and often out of sight of land, and they were perhaps dispersed along the lakes and inlets, to hunt the reindeer, after ending the trade with their eastern brethren. In the evening the Esquimaux had a leaping-match with our people, in which one of the former bore away the palm. A guard was set during the night. It was high-water about 4 o'clock, both P. M. and A. M.; rise of the tide six inches.

The wind having fallen and the ice relaxed in the forenoon of the 12th, we pushed out through it to gain clear water. The day was bright and fine. The mountains stood forth in all the rugged boldness of their outline, displaying their naked rocky peaks and steep descents with such marvellous distinctness that they seemed to touch the coast of which they form the bulwarks. The swell being with us, as long as the calm continued we made some progress with the oars; but a northerly breeze springing up raised such a cross sea that we were in imminent danger of foundering, when we providentially discovered an opening through the ice, leading into the mouth of a small stream—between Backhouse and Malcolm rivers—flowing from an inner basin, where we found a secure and pleasant harbour. It was now 3 P. M.;

and, incited by the beauty of the weather, I ascended the nearest hill, six or seven miles distant, whence I enjoyed a truly sublime prospect. On either hand arose the British and Buckland Mountains, exhibiting an infinite diversity of shade and form; in front lay the blue boundless ocean strongly contrasted with its broad glittering girdle of ice; beneath yawned ravines a thousand feet in depth, through which brawled and sparkled the clear alpine streams; while the sun, still high in the west, shed his softened beams through a rich veil of saffron-coloured clouds that overcanopied the gorgeous scene. Bands of reindeer, browsing on the rich pasture in the valleys and along the brooks, imparted life and animation to the picture. Reluctantly I returned to the camp at sunset.

We were detained next day by the ice and a contrary wind. The latitude 69° 35′ 29″ was observed, and the thermometer rose to 48°. The sun set brightly at a quarter past 9.

The 14th was likewise fine, but the east-wind blew too strongly, and the ice was in too violent motion for the prosecution of our voyage. We made the most of the detention by rambling about the skirt of the mountains, where two fine does were shot; and I almost envied the Indians and Esquimaux, who, dispersed along the rivers

and in the valleys, were now enjoying the brief season with that zest which perfect freedom alone can give. A few stars were visible to-night; the aurora also made its first appearance.

15th.—The wind fell, and at 5 A. M. we embarked. It was one of those glorious mornings whose enlivening power all nature acknowledges. A copious dew had fallen, the air breathed light and balmy, and the deer bounded across the plains. As we advanced, the mirage played some strange antics on the water, which it elevated on the north and west sides into the similitude of two highly inclined planes, garnished with innumerable icebergs, apparently ready to topple over upon us as we rowed through this mimic valley.

The high land of Herschel Island assumed distorted and varying shapes, and it was not till 5 in the afternoon that we reached the strait separating it from the main shore. After passing this channel, we encountered a rolling swell that much retarded our progress. A good many natives were seen as we coasted along, some of whom came alongside, welcomed us back from afar *(awāné)*, inquired about the last camps of their countrymen we had seen, and were no less delighted than astonished when we read the names of some of them from our

note-books. At 10 P. M. the moon, now at the full, and seen for the first time since our leaving Athabasca, arose, and, after lowly circling over the eminences next the coast, set again long before the reappearance of the sun.

At 1 next morning we reached Point Stokes, where we supped, and were soon visited by the women and junior branches of several Esquimaux families, who told us that the men were all hunting in the interior. We asked one or two of the young lads to accompany us, with a view of training them as interpreters for the eastern voyage; but they peremptorily refused. Resuming our route, we at 6 reached Point Kay, where we halted till the afternoon to rest and refresh our wearied men. During this i nterval the thermometer ascended to 54°, and a sea-bath was a real luxury.

Several native families visited us. They confirmed what the remarkable clearness of the atmosphere had discovered to us; that the Babbage is at this time of year an insignificant stream, but swells into a torrent in the spring when the mountain snows dissolve. This great reduction in the volume of water discharged into the sea accounts for the fact, that some deep channels in the reefs, through which our boats entered on the outward voyage, were

now completely filled up. Among the gravel two pieces of pitch-coal were found. One of the young half-breeds killed a brace of ducks at a shot, much to the amazement of the Esquimaux, who begged for the birds as a great curiosity. As the twilight drew on, numerous fires blazed along the beach, round which groups of natives were collected, many of whom came off to us. Near Point King we had eleven fathoms' water, with a clear sandy bottom, and four small whales were seen in the offing. At midnight we once more landed on Shingle Point, where we were much harassed, during the few hours we stayed, by a large and motley party of Esquimaux. While the men slept in the boats, Mr. Dease and I kept guard on the beach, but had the utmost difficulty in preventing pilfering, though we had made our unwelcome visitants the usual presents. One hideous dwarfish creature was particularly troublesome, and, in spite of our precautions, a frying-pan was missing out of the bow of my boat in the morning. Upon my demanding restitution, the offender was pointed out; and I was in the act of going up to him, when he drew his long knife upon me, and at the same moment M'Kay called out that one of his accomplices was bending his bow to transfix me through the back.

I turned round in time to prevent the treacherous design, and, as our people were prepared to support us, the Esquimaux were glad to submit; and an old man produced the bone of contention from under a pile of drift wood.* I may here remark, that, except at Point Barrow, we invariably found the arrogance of the natives to increase in due proportion with their numbers. The moderation and forbearance of the whites are, in their savage minds, ascribed to weakness or pusillanimity; while the fierceness of the Loucheux and Mountain Indians inspires terror. Notwithstanding the deceitful good-humour of the Esquimaux, I have no hesitation in asserting, that, were they in possession of fire-arms, it would require a stronger force than ours to navigate their coasts.

We gladly re-embarked at 5 in the morning of the 17th. The weather was delightful, but the wind adverse, and our progress consequently slow. The hills still clothed in verdure charmed the eye, and indicated our near approach to the milder climate of the Mackenzie. After several hours' labour in passing the flats of Shoalwater Bay, with the ebbing evening tide, we entered

* M'Kay afterwards told me that he thrice had his finger on the trigger of his gun, to be beforehand with the fellow who was taking aim at me behind.

the western mouth of the river, and there encamped. With the telescope we discovered that the village on Tent Island was abandoned; from which we inferred that a narration about guns and cutting of throats, with which some of the Esquimaux had entertained us as we came along to-day, referred to an actual or apprehended attack of the Loucheux to avenge their slaughtered friends, and not to a scheme of the Mountain Indians to waylay us, as we at the time imagined. I here had the satisfaction of obtaining a set of lunar distances, which gave for the longitude 136° 36′ 45″ W.; the latitude, by the moon's meridian altitude, being 68° 49′ 23″ N. The longitudes assigned to the various points in our discoveries have been corrected and reduced back from hence by the watch; and the results are highly satisfactory, our expeditious return in thirteen days from Point Barrow yielding indeed little scope for error. Mr. Dease and I watched while the men slept. The night was serene, and not a sound broke upon the solemn stillness, save the occasional notes of swans and geese calling to their mates, and the early crowing of the willow partridge, as the soft twilight melted into the blush of dawn.

Our ascent of the Mackenzie was performed almost exclusively by towing, at the rate of from

thirty to forty miles a day. The crews were divided into two parties, who relieved each other every hour, and were thus spared all unnecessary fatigue. The weather continued calm and fine; the sultry heats of the short summer were past; the nights were cool, and no musquitoes disturbed our rest, or assailed us in our woodland rambles. The waters were considerably abated, and large portions of the high mud-banks, undermined by their action, were constantly tumbling down, with a crash that, in the silence of evening, was heard for miles.

Up to Point Separation, where we encamped on the 21st, moose-deer were numerous, for there were neither Esquimaux nor Indians to disturb their favourite haunts. Next day we fell in with several parties of Loucheux, whose unobtrusive manners were pleasingly contrasted with the importunate and annoying behaviour of the Esquimaux. We were glad to learn that their tribe had had no hostile meeting with the latter during our absence, In the evening there arose a sudden storm of wind and rain. During the two following days we continued to meet the Loucheux, on their return from Fort Good Hope. The women, children, and baggage were descending the stream, on rafts formed of two large logs joined by a cross bar thus, A.

On the fore part rested a raised platform, where the passengers sat; and the men escorted these primitive vessels in their bark canoes, which, when they choose, are conveniently secured between the projecting arms of the after-part of the rafts. Among these people was the lame man whom Franklin saw in Peel River. From the course of the latter stream through the rich beaver country that borders on the mountains, it appeared to us well worthy of the Company's attention, and was three years after settled by Mr. Bell.

The sun disappeared on the 23rd for about eight hours, a rapid change from constant day!

On the 24th we encamped a mile above old Fort Good Hope, on the opposite side of the river, under a high cliff of crumbling slaty rock, strongly impregnated with iron, and containing a great deal of sulphur. There was some thunder with lightning and rain during the night. The navigation became more obstructed by shoals and sandbanks as we ascended. One of the boats struck, and half filled with water, which caused the loss of part of a day to dry the soaked cargo and repair the damage. We saw a good many Hare Indians, who supplied us with fresh fish; and a couple of Loucheux, on their way to Fort

Good Hope, kept company with us for two days, at the end of which they fell behind, being unable to bear the fatigue of our long hours—from 4 in the morning to 8 or 9 at night.

On the evening of the 26th there was a brilliant display of the aurora, which our Loucheux companions called "saung." Ursa major they denominated "eutyæ," and told us that its Esquimaux appellation is "bellic." They mimicked the manners and address of that race to the life. Upon the beach was found the body of a female child about five years old, who, we afterwards learned, had been abandoned by the outer Hare Indians. The poor child had lost both parents, and, having no other relatives to take care of it, was cruelly left to its fate. Our chancing to pass beyond the limit of the traders' travels disclosed a circumstance which these people thought would have remained secret; for they have been so severely taken to task by the Company's officers for similar acts of barbarity, that they are now comparatively rare, and in general carefully concealed. The practice of mothers casting away their own female children, which is common at this day in China, Madagascar, Hindostan, and other countries more blessed by nature than Mackenzie River, was frequent here, as it was in

all parts of America before the settlement of the whites, and is still among a tribe far to the westward of Fort Norman, who only descend for a short time from their mountains every second or third year, and have therefore not become humanized by intercourse with the establishments.* Yet why should we judge harshly of these poor people? Let the philanthropist weigh the following passage in Gibbon, before the savages of the New World are pronounced a reproach to the human species: "The exposition of *children* was the prevailing and stubborn vice of antiquity. It was sometimes proscribed, often permitted, almost always practised with impunity by the nations who never entertained the Roman ideas of paternal power; and the dramatic poets, who appeal to the human heart, represent with indifference a popular custom which was palliated by the motives of œconomy and compassion." And immediately afterwards: "The

* In a conversation with the Dog-ribs, we afterwards learned that these Mountain Indians are cannibals, and, immediately upon any scarcity arising, cast lots for victims. Their fierce manners have been circumstantially described by an old man, who, while yet a stripling, fled from the tribe, and joined himself to the Dog-ribs, in consequence of his finding his mother, on his return from a successful day's hunting, employed in roasting the body of her own child, his youngest brother.

lessons of jurisprudence and Christianity had been insufficient to eradicate this inhuman practice, till their gentle influence was fortified by the terrors of capital punishment." * The candid inquirer will also do well to reflect what would probably have been the fate of many of the youthful inmates of the European Foundling Hospitals, had such institutions been unknown. And when he considers, moreover, that these last are generally the offspring of *guilt*, the pride of national superiority ought to die within him. Though the Company's posts in the Mackenzie River can barely subsist, the officers do all in their power to maintain poor objects and forsaken children. Were they to give unlimited indulgence to the natives, half the population would be left on their hands, general starvation must ensue, and the surviving whites would have to abandon the country. The following are Sir John Franklin's remarks on this painful subject: "Infanticide is mentioned by Hearne as a common crime amongst the Northern Indians, but this was the first instance that came under our notice, and I understand it is now very rare amongst the Chipewyan tribes; an improvement

* "Decline and Fall of the Roman Empire," vol. viii. page 56.

in their moral character which may be fairly attributed to the influence of the traders resident among them." *

At 9 in the morning of the 28th we reached Fort Good Hope, where we found Mr. Bell and all the inmates well, but labouring under a scarcity of provisions occasioned by the failure of their summer fishery. We had our wet pemican bags immediately ripped up and laid out to dry, for even the dogs reject this invaluable aliment when it has become mouldy.

On the 29th there fell some light showers, but the weather continued mild, the temperature being steady at about 60°. Several Loucheux brought in furs to trade, and were very anxious to obtain, in exchange, the shells called "eyeaquaws," a sort of cowries, which in the Columbia and New Caledonia form the native currency. This foolish fancy originated in their having seen some of these shells with one of the half-breed women; and the use to which they intended to apply them was to thrust them through the septum of the nose—an ornament of a very grotesque description. These people prefer such trivial articles to the cloth and blankets with which the stores are furnished. Their real wants being limited to arms, ammunition, kettles, ironwork,

* Second Expedition, page 64.

and cutlery, their furs are cheaply purchased. The spoils of the moose and reindeer furnish them with meat, clothing, and tents.* This day was allowed our men for rest, and in the evening they celebrated their return from the sea by a dance.

Having completed our arrangements, we took our departure the following afternoon; our party being now increased by Mr. Dease's wife, niece, and grand-daughter. The weather was occasionally cloudy, with some smart showers of rain, while the loftier mountains appeared newly covered with snow.

On the evening of the 3rd September we crossed the confluence of the transparent waters of Bear Lake River, and encamped on its southern side. Here we deposited our cargoes, and placed them under the charge of two men, with the intention of proceeding unencumbered to Fort Norman, there to meet our outfit and despatches. A meridian altitude of *a* Aquilæ placed us in lat. 64° 54′ 48″ N.

4th.—A cold frosty night was succeeded by a lovely day. We took an early breakfast at the burning banks, and lighted our fire with coals of

* They are more stationary in winter than other tribes; and their dwellings are partly under ground, like those of the Samoides of Northern Siberia.

nature's kindling. In the woods that crown this vast hot-bed we found a great profusion of very fine raspberries and gooseberries, which afforded us a rich treat. The beautiful river and mountain scenery of this part of the Mackenzie is already well-known, and at this period the many-tinted foliage of autumn highly embellished the prospect. In the afternoon a very large black bear made his appearance on the opposite side of the river. After reconnoitering us for a while, with a look of great stupidity, he took the water. Sinclair and I then ran to the end of the island, along which we were tracking, in order to shoot him as he landed; but, on seeing us, he sheered out again, and the signal was given to M'Kay, who immediately pursued with his boat, and dispatched him in the stream. His flesh proved excellent. At 6 P.M. we reached Fort Norman, to the utter amazement of the person in charge, who imagined us still on the coast. The boats from Portage la Loche, carrying the goods and provisions for our second campaign, — if I may be allowed the term, — were not yet arrived, but made their appearance on the 8th, when we had the happiness to receive tidings from many dear and distant friends. The season had now fairly broken up, and on the 9th it rained very heavily. We closed our despatches to the Company, and got

everything in readiness for our departure to winter-quarters.

The 10th was ushered in by a severe snow-storm and hard frost. At 7 in the morning our express, carried by Taylor and young Wentzel in a small canoe, started for Fort Resolution, and at the same moment we set out for Great Bear Lake. So strongly did it blow from the northward, that we had to tow the boats down the current; and it was late when we reached Bear Lake River. For the three following days we continued ascending its clear and rapid stream. Everything wore a wintry aspect; a good deal of snow fell, large masses of old ice lay undissolved on the beach, and the still parts of the river were newly frozen over.

On the 12th we saw some Hare Indians below the rapids. The path there led along the almost perpendicular face of loose rocky cliffs, and often on the edge of the rapids, where a single false step would have been fatal. It was the most dangerous tracking I had yet seen; but we all passed without accident. Indeed, throughout the fur countries, since the introduction of boats, deaths by drowning are of rare occurrence: during the old canoe system they were but too frequent; though I question whether they ever equalled the proportion of casualties among

sailors, fishermen, Canada raftsmen, and various other hazardous professions.

On the 13th we encamped within eight miles of Great Bear Lake. When we came in view of that magnificent sheet of water the following morning, it was violently agitated by an easterly wind. It occupied us two hours to reach the ruins of Fort Franklin; and, after a cold ducking from the waves, we found a snug harbour in the "little lake," where the officers of the former expedition made their experiments in acoustics. The bateaux, which had been despatched ahead from Fort Norman, were waiting for us here, and we encamped together. Several nets were set, with which we soon drew a good supply of trout, pike, white-fish, grayling, inconnu, and salmon-herring. In the evening I obtained a set of lunar distances; the longitude resulting from which was 123° 13′ 0″ W., being sixteen seconds westward of the position previously assigned to Fort Franklin. This difference, equal to two hundred yards, might be about our actual distance from the site of the buildings; and, though such perfect agreement on a single trial is, of course, accidental, it strengthened my confidence in the exactness of which the lunar method is susceptible, when the distances are carefully taken, and rigorously computed.

It continued to blow from the east till near noon on the 15th, when, the wind moderating, we embarked, and it soon afterwards fell calm. The afternoon, though cold, was serenely beautiful. Almost at the moment of sunset the moon appeared, and, while rising, assumed successively the most singular shapes, shewing the great power of the terrestrial refraction.

Next day we made good progress with the oars. The immediate borders of the lake are low; and the face of the country is mossy and barren, or poorly wooded with spruce-fir. I sounded in thirty-four fathoms about half a league from the shore; but there are in Great Bear Lake far greater depths than this—descending below the level of the ocean. When we encamped at dusk, a long rolling swell threatened the approach of a gale.

On the 17th we started at 6; the weather dark and squally, with a short cross sea, and the wind close. At noon, when within two miles of the eastern side of "the Bay of the Deer-pass," we were alarmed by a cry of distress from Mr. Dease's boat, which had sprung a plank, and was rapidly filling. Providentially, one of the bateaux was within reach, with whose aid we took out the people and the drenched cargo, and towed the injured boat to land, which we gained

after a tough pull, for it blew dead off shore. The remainder of the day was employed in repairing the damage. The evening was very boisterous, and snow fell during the night. We pulled under the lee of the land on the 18th, to the Cape of the "Scented-grass Mountain," where the strength of the north wind obliged us to put back a mile or two, to seek shelter in a little bay. At noon the thermometer stood at the freezing point, and one or two reindeer were seen.

During the four succeeding days we were detained at the same spot by severe winter weather, and the country was permanently covered with snow. Our canvass tents affording no protection from the rigour of the cold in so exposed a situation, we constructed a leather lodge, in which we Indianized comfortably enough. The nights were extremely dark; and ice, an inch thick, formed in the kettles. Our hunters killed three fine reindeer, one of which—a superb buck—must have weighed from two to three hundred pounds. From the top of the hills I had the good-fortune to catch a glimpse of the high land behind Cape M'Donell, bearing north-east, on the opposite side of the lake. All the small lakes in the hollows of the mountain were firmly frozen. Alarmed at the near approach of winter, the Indians, who formed half

the crew of the two bateaux, wished to leave us; but we resolved to prevent their desertion, by seizing the first practicable moment to attempt the grand traverse to Cape M'Donell, instead of the safer but more circuitous route by Smith's Bay.

23rd.—The wind moderated, and changed from north to east; the temperature of the air was 26°; the clouds were black and threatening; and there was a heavy swell. We determined to make a push; and, after an early breakfast, stood out for Cape M'Donell, guided by the compass. I led the way in the small boats; and, to encourage the people, Mr. Dease followed with the bateaux. The change of wind having raised a dangerous cross sea, we were rather roughly handled. We had to sail within four points of the wind; the boats and rigging soon became one mass of ice; and five hours elapsed before we got sight of the opposite land, greatly to the relief of the men, who all imagined that I was steering a wrong course. The wind again freshened; but the sea, though it ran still higher, became more regular, and in three hours more we safely reached Cape M'Donell. At sunset we found a few dwarf pines in a little bay, where we encamped. The bateaux did not make their appearance, having lost sight of us, and pulled in

for the wrong side of the cape. Had it not been for Mr. Dease's presence, they would assuredly have gone up M'Tavish Bay to look for the establishment; as it was, they had hard work to reach the shore. In the snow around our encampment the tracks of Alpine hares were numerous.

Being joined by our consorts in the forenoon of the 24th, we alternately sailed and rowed among the islands and bays that abound on the east side of this large arm of the lake. A great deal of young ice had formed along the shores; the weather was snowy, squally, and excessively cold. A herd of reindeer, and many large flocks of partridges, now perfectly white, were seen in the course of the day. We passed, near the Narrakazzæ Islands, huge lumps of rock, that rise out of the water to the height of a hundred feet. This I ascertained by climbing the highest of them the following spring, whence I had a commanding view of the whole group, and of the frozen lake around.*

On the 25th the weather was rather milder. A solitary Canada goose, the very last straggler of the rear-guard, flew past to the southward. Several loons, and some flocks of small diving

* In the Appendix of Franklin's Journal, these islands are stated to be *seven* hundred feet high.

ducks, still lingered in the open water. As we passed through the strait where we afterwards established our principal fishery, a ravenous trout seized the steersman's oar, and was almost drawn out of the water before relinquishing its hold. We made for the mouth of Dease River, where we were met by an old Indian, who directed us to our future residence, about three miles to the westward. We reached it at 4 P. M., and had the satisfaction of finding our comrades safe and well. Our greetings were cordial indeed; and, with feelings of sincere gratitude to an Almighty Protector, we bestowed upon our infant establishment the name of Fort Confidence.

CHAPTER IX.

Transactions at Fort Confidence, winter 1837-8.—Death of Peter Taylor.—Winter Discoveries and Surveys.

We were soon surrounded by a crowd of Dog-ribs and Hare Indians of both sexes, who hailed with delight our residence upon their lands. They manifested unbounded joy at our return from the terrors of the sea, which their timid imaginations had peopled with monsters and cannibals; and it is impossible to depict the eager curiosity with which they viewed the weapons, dresses, and ornaments of the Esquimaux. They told us as a marvel, that, in the barren grounds to the eastward, they had killed a young buck deer with the head of an Esquimaux arrow sticking in the yet soft horn. Our building party had only reached the site of our winter-quarters on the 17th of August, the very day we re-entered the Mackenzie; and a small store, with the skeleton of a dwelling-house, was all that indicated our destined abode. Ritch informed us that, as he ascended Bear Lake River,

the ice, recently cleft by the stream, formed two solid walls, in some places forty feet high. They towed their boat with great danger in consequence of the strength of the current, pent up and contracted by these frozen cliffs, along the top of which lay their own slippery and insecure path. The icy masses, in many places undermined and honeycombed by the action of the water, threatened equally the boat that passed underneath, and the men who walked above. In this manner they reached the head of "the rapid" on the 10th of July, a week from the period of our separation. There they encountered the ice from the lake, which had just begun to break up, and came driving down before the easterly winds. They were compelled to land their cargo, and haul up their boat with the utmost precipitation; and the Indian hunters lost one of their canoes. The ice continued descending with fearful rapidity, large fragments being often forced upwards by the pressure, and sometimes choking the passage, till the accumulated weight of water and ice triumphantly burst the barrier. From the rapids it cost the party a fortnight's labour to reach the head of the river, a distance of only thirty miles. During this interval, the fisherman, with all the dogs, had been sent by land to the lake, where he

supported his canine charge on the produce of nets set under the ice; and, from the "little lake" at Fort Franklin, the Indians latterly brought fish every day to the people at the boats. At length they reached that place on the 6th of August. The passage of the lake occupied ten days more. From the Scented-grass Mountain nothing but ice was visible, but after a delay of three days they made their way to the Acanyo Islands in Smith's Bay. There they discovered a narrow opening, leading through heavy ice for some distance; but, when it terminated, they had to force their way with great labour and risk for a whole day and night before they reached the northern shore. At the mouth of Haldane River they found a number of Hare Indians suffering severely from influenza, which had carried off two old people. They followed the party the same evening; and Ritch was shocked to learn that they had abandoned an orphan boy, about six years old. He immediately sent back two of our Chipewyans for the child, whom they brought safely to the establishment, where the little fellow passed the winter. From the extraordinary severity of the season, a journey of two hundred and fifty miles occupied forty-five days, and the ice of Great Bear Lake proved no less formidable than that of the Arctic Ocean.

Our first care was to send back the Mackenzie River people, who had rendered us such essential assistance. They started the morning after our arrival, and, being favoured by a steady east wind, crossed Great Bear Lake in three days, and escaped the risk of being set fast. The same day we sent to examine Dease River, in reference to the transport of the boats; but that stream was already frozen. The Indians even pretended to assure us that the sea, at the mouth of the Coppermine River, is open one moon before the ice breaks up in the northern parts of Great Bear Lake. The singular shape of this inland sea, branching out from a common centre into a number of extensive arms, which act as so many points of support to the body of the ice, conduces in no small degree to its tardy disruption. The situation judiciously chosen for the establishment was a wooded point, on the northern side of a deep and narrow strait, formed by a large island. It commands a fine view of the lake to the east and west, and the rocks form a natural landing-place for the boats at the very door. Nets set in the strait furnished Ritch and his three men with subsistence till our arrival. The fishery was likewise of the greatest benefit to the natives, many of whom we found still suffering from the influenza. A

few simple medicines were administered, and some assistance in food and clothing rendered to the sufferers, all of whom gradually recovered. In consequence of this unfortunate malady, no provisions had been collected, and our Chipewyan hunters were at this moment lying ill on the barren grounds, twenty miles to the eastward. I paid them a visit on the 30th of September, and remained with them several days, in order to afford them every possible aid. Those who were in the worst state were brought to the house, and through care and nourishing diet slowly regained their strength. The disease afterwards attacked, successively, the women and children, all of whom recovered; and last of all the old man, the father and grandfather of the party, who, from his age and infirmities, sank under it. His body was decently interred by us on the island opposite the establishment, and this mark of respect to the remains of their common parent contributed, more than all previous benefits, to fix the affections of our Chipewyans. We enjoy, indeed, the proud reflection that our expedition, so far from inflicting either famine or disease upon the natives, has, by the blessing of Heaven, been the immediate means of preventing or alleviating those calamities.

To commence a winter within the Arctic

Circle with a considerable party destitute of provisions, and the Indians upon whom we mainly depended for subsistence requiring *our* aid and support, was an alarming condition, which demanded the utmost exertion of our personal resources. More nets were set in the strait; and, while some of the people were employed in erecting the necessary buildings, others were engaged in converting all the twine last received into nets. The sudden change of food, from pemican and flour to white-fish, affected several of the men with dysentery. The fish, indifferent as we found them, soon diminished in number before the increasing cold.

On the 5th of October, just fifty days later than Ritch's deliverance from the ice of a former winter, the strait froze over, but broke up again the following day, and finally set fast on the 10th, when the thermometer first fell below zero. I took advantage of the interval to proceed with a boat round the island to another and still deeper strait near its southern extremity. There was a camp of natives then in the neighbourhood; and here we established our principal fishery, which, after a temporary failure, and removal towards the Narrakazzæ Islands, continued during the greater part of the winter to support from two to four hands, but finally

ceased in March. Mr. Dease placed another fishing-station on a lake about twenty miles to the northward; but it failed early in November, and was then removed to the sources of Haldane River, four days' journey westward, with no better success. We were therefore compelled to place our reliance upon the capricious movements of the reindeer; and, in order to eke out our scanty and precarious subsistence, I spent a great part of the months of October and November in hunting excursions with those Indians who had recovered from their illness. The deer fortunately began to draw in from the north-east to the country between Great Bear Lake and the Coppermine; and, as soon as any animals were shot, I despatched a share of the prey by our people and dogs to the establishment. At the same time I highly relished the animation of the chase, and the absolute independence of an Indian life. Our tents were usually pitched in the last of the stunted straggling woods, whence we issued out at daybreak among the bare snowy hills of the "barren lands," where the deer could be distinguished a great way off by the contrast of their dun colour with the pure white of the boundless waste. The hunters then disperse, and advance in such a manner as to intercept the deer in their confused retreat to windward, the

direction they almost invariably follow. On one occasion I witnessed an extraordinary instance of affection in these timid creatures. Having brought down a fine doe at some distance, I was running forward to dispatch her with my knife, when a handsome young buck bounded up, and raised his fallen favourite with his antlers. She went a few paces, and fell; again he raised her, and continued wheeling around her, till a second ball—for hunger is ruthless—laid him dead at her side. Until the month of December we were living literally from hand to mouth, though all, except the men absolutely required to keep the houses in firewood, were distributed at the fisheries and in the various native camps. The excessive cold at length drove the deer towards the shelter of the woods, where the hunters were more successful. The climate of the elevated unsheltered region to the *eastward* of Fort Confidence is far more severe than that of the borders of the lake. The winds, too, are more violent; and a bright starlight night is often succeeded by a tempest of snow-drift. From the top of a hill in this quarter I discovered an unknown arm of the lake, which I had afterwards melancholy cause to examine. In a *southerly* direction the interior of the country is very hilly, but, except on the higher ele-

vations, tolerably wooded; and every three or four miles occurs a small lake, contained in the hollows between the hills. In these low sheltered spots, where we generally made our encampments, the largest trees grow, and I noticed two or three that attained a diameter of eighteen inches, which is large timber for such a barren, rocky country. The whole region is apparently of primitive formation; the few rocks, left exposed by the snow, consisting of red and grey granite. In this direction I travelled to within view of M'Tavish Bay with the party of an Indian named Edahadelly, who, to decoy the deer, carried a pair of antlers before him, with which, and a bundle of willow twigs, he used to imitate the motions of the living animal; his own dress, made of its hairy hide, completing the deception.

But to return to the affairs of the establishment. The houses were constructed on a very small scale, to suit our means and the severity of the climate. They consisted of a log building, forty feet long, and sixteen broad, containing a chamber at either end for Mr. Dease and myself, separated by a hall, sixteen feet square, which answered the threefold purpose of our eating-room, kitchen, and an apartment of all work for the Indians. There was, indeed,

the frame of a kitchen erected behind, but we were unable to complete it till the following year, when an observatory was also built. Our men's house was thirty feet long and eighteen broad, and, with the store, formed three sides of a little quadrangle fronting the south. The whole was habitable in a month after our arrival; but, from the smallness of the timber, and the difficulty of procuring enough of the frozen earth to cover the light roofs, our dwelling was miserably cold, the wind and snow having in many places free ingress. The men's quarters were rather more comfortable.

On the evening of the 6th of December a few families of Dog-ribs arrived, in the utmost consternation, from the bay discovered by me to the eastward. They had seen strange tracks of *round* snow-shoes and the smoke of distant fires, and, abandoning everything, had fled for their lives—burrowing at night under the snow; supposing that either the Esquimaux or Copper Indians had invaded their lands. The first idea that occurred to us was, that it might be some of Captain Back's party from Repulse Bay, who had been overtaken by winter on the coast, and were now wandering in quest of food and shelter. This opinion was communicated to the Indians, and three of the young men reluctantly

consented to accompany me, on condition that their families should remain behind till the danger was over. Three of our own people, with dog-sledges, attended me, to bring relief to the supposed sufferers, and we started the following day.

On the 9th we reached the bay, and made our fire in a conspicuous situation, where it would have been visible during the night from a great distance. In such an open stormy country tracks are soon obliterated; but, when we proceeded next day to make the circuit of the northern part of the bay, we found on a low point the remains of an old fire, and the encampment of a single person. We likewise discovered a cache of deer's meat, with several strips of birch bark for kindling fire, and other vestiges, which immediately proved that the stranger must be a half-breed or Fort hunter, and that, though he might have lost his way, he was in no want of provisions. I concluded it to be the expected bearer of our express from Port Simpson—a Cree Indian in the Company's service, called Le Sourd; which would account for the appearances that had terrified the timid natives. The latter, however remained unconvinced, and, with the exaggeration of an alarmed fancy, declared that they

had seen a line of fires stretching along the mountains towards the Coppermine River—here only thirty miles distant. The whole day was occupied in searching for further marks of the stranger, to no purpose; from which I inferred that he had retraced his steps southward. But, in case he should return to the same place, we erected marks to guide him to the Indian lodges, not far removed from the borders of the lake. This new branch of M'Tavish Bay is enclosed by a range of barren rocky hills of considerable height—the favourite haunts of the shaggy musk-ox. It becomes continually narrower till near its northern termination, where it contracts to the width of half a mile, and again expands into a circular basin three miles in diameter, which is the nearest approach of Great Bear Lake to the Coppermine River, and is undoubtedly the part indicated by The Hook to Sir John Franklin on that officer's first expedition. The extensive peninsula comprehended between Dease and M'Tavish bays, and terminating in Cape M'Donell, is the hunting-ground from whence we derived the greater portion of our subsistence during a winter of nine months.

On the 29th of December, Le Sourd—the very man who had caused the natives such an alarm—arrived at Fort Confidence, in company with

some Indians, carrying our long looked-for packet. His comrade, Peter Taylor, had died on the way in M'Tavish Bay of an old pulmonary complaint, aggravated, no doubt, by the fatigue of the journey; and he himself, having never heard of the latter arm of the lake, had wandered about searching for the establishment, and hunting reindeer, till he fortunately fell in with a camp of our Indians as he was returning towards Fort Norman. He had started from the latter place with his ill-fated companion, who was a relative of his own, in a small canoe, and reached the rapids of Bear Lake River, where they were set fast in October. They then struck over land to the lake, and had fine travelling on the smooth ice, along its southern and eastern shores, the centre of the lake being still open. By the time they reached M'Vicar Bay, Taylor complained of weakness; upon which his friend, with considerate kindness, carried his provisions and spare clothing, and rendered him every possible assistance. At last, when he became unable to walk farther, Le Sourd made a comfortable encampment, and nourished the dying man with venison broth; and, when he expired, carefully laid his body in a grave dug by thawing the earth with fire. He even placed, with Indian superstition, a valuable gun,

that the grateful sufferer had given him, beside the remains of its deceased owner. Such generous and faithful conduct, would do honour to human nature in its noblest state, and did not go unrewarded by us. While we lamented the loss of an active and trusty servant, it was consoling to know that his death was not occasioned by privation or unaccustomed fatigue, but by the progress of an incurable disease, which our care, had he reached the establishment, might have alleviated, but could not have arrested.

The packet contained letters from Governor Simpson, and from various private friends. The following is an extract of the Governor's official despatch, dated Norway House, 30th June, 1837. "All we can now say in regard to the expedition is, that both the Government and the Company feel the most lively interest in its success. In regard to supplies, you have a carte blanche; our depôts are open to your demands, and you are authorised to call on the districts of Athabasca and Mackenzie's River for any facility or assistance in men, goods, provisions, Indians, craft, &c. &c., you may require. It rests with you to apply for and employ those means as you may find necessary; and we have no farther instructions to give, than to entreat you will use your best endeavours to accomplish the great

object in view, by any means, or in any way, you may determine upon. The season has hitherto been unusually cold. Even here we are now rarely without fires in the sitting-rooms, and to your mission I fear it is very unfavourable. When you started from hence, it was expected that the objects of the expedition could be completed in two years; but, should the unfavourable state of the season prevent your accomplishing the western survey this summer, you had better make another attempt next year, and defer the eastern survey until the following, i. e. take three summers instead of two. In short, we are more anxious to accomplish this important and interesting object than I am well able to describe, and are willing to incur any expense or inconvenience to the service to that end." A previous letter from London informed us of Sir George Back's expedition to Wager Inlet, or Repulse Bay, in the Terror bomb, with the view of prosecuting the survey of the coast westward in boats; but that his operations were in nowise to alter our plans. Indeed, it appeared not unlikely that we might meet somewhere about the mouth of Great Fish River, an event which would materially contribute to the safety of both parties. It was highly satisfactory to reflect that we had already explored the un-

known western coast, contrary to the expectation of our most sanguine friends, since even the canoes from Canada had been stopped twenty days by ice. Had we failed in our first attempt, and come to winter at Fort Confidence, the whole frozen extent of Great Bear Lake (which seldom breaks up before the 1st of August) would have interposed between us and the navigable waters of the Mackenzie.

Fishing Island, opposite to Fort Confidence, is for the most part tolerably wooded. The land swells into a diminutive hill, having an elevation of two degrees, due south. Over this little hill the sun, as I had previously calculated, did not rise for forty-three days, from 30th November to 12th January. The very children clapped their hands for joy when the bright orb first flashed above the trees; and though we did not, like the ancient Scandinavians of the Polar Circle, hold a festival for his resurrection, our feelings were perhaps no less joyful. To cheer us during this long dark interval, the loveliest of planets, Venus, appeared above our horizon in December, and continued to shine upon our solitary dwelling with daily increasing altitude and lustre. I afterwards repeatedly discovered both her and Jupiter, with the naked eye, in presence of the sun. The intense cold was of extraordinary

duration. So early as the 11th of November, the thermometer fell to 32° below zero. The *average* temperature of the latter half of December was —33½°, and that of all January —30°.

The most intense cold was frequently accompanied by strong winds from the east and north-east, and both men and dogs were severely frost-bitten while traversing the barren grounds for food. Few of the animal creation remained around us during this dreary period. An occasional track of a wolf, wolverene, or marten was met with in woody spots; a single alpine hare was snared; a very few brace of white ptarmigan were shot; and in the barren grounds to the eastward I procured a curious hawk-owl. On the south-east side of M'Tavish Bay the Indians found the track of a stray moose, which they regarded as an extraordinary occurrence, for that animal loves the shelter of thick woods. The only regular visitants at the house were the raven and the whiskey-john (garrulus Canadensis). A considerable colony of mice hibernated in our store, where they committed some depredations; and a marmot was found frozen to death near one of the fisheries. The white-fish, which were of a tolerable size in the fall, were succeeded in scanty numbers by a smaller and lighter-coloured species during the winter, when the fish

retire to the depths of the lake. In the early part of winter, and afterwards in the spring, we took a very few trout of various sizes up to fifty pounds' * weight, with lines set under ice latterly seven feet thick. Back's grayling, methy, small sucking-carp, and a casual pike, completed the list of our finny captures; and a single fine inconnu was caught in a net, June 1839. Throughout the winter there is a current running *outwards*, in the straits on either side of Fishing Island. This current is reversed by strong westerly winds, (which usually send a few fish into the nets,) though in what manner the waters of the lake are affected under such a covering of ice, it is difficult to conceive. Several currents were also spoken of by the Indians as existing in the narrow arms of M'Tavish Bay. These must be independent of the tributary streams, which, like Dease River,—the principal feeder,—are all frozen to the bottom.†

On Christmas and New-Year's days we entertained our assembled people with a dance, fol-

* One of the largest, taken at Fort Confidence 2d May, weighed forty-seven pounds, length four and a half feet, mid-girth twenty-seven inches (Salmo namaycush).

† I had the curiosity, when the thermometer stood at —49°, to cast a pistol-bullet of quicksilver, which at ten paces passed through an inch plank, but flattened and broke against the wall three or four paces beyond it.

lowed by a supper consisting of the best fare we could command. . By this time we had, through our indefatigable exertions, accumulated two or three weeks' provisions in advance, and no scarcity was experienced during the remainder of the season. The daily ration served out to each man was increased from eight to ten, and to some individuals twelve pounds of venison; or, when they could be got, four or five white-fish weighing from fifteen to twenty pounds. This quantity of solid food, immoderate as it may appear, does not exceed the average standard of the country;* and ought certainly to appease even the inordinate appetite of a French Canadian.† The Company's servants are not less well clothed and paid than they are fed; they are treated by

* Mr. Dease assured me that under an ancient manager of Athabasca, who passed for a severe economist, and whose assistant he was at the time, the men succeeded in obtaining the exorbitant daily allowance of fourteen pounds, or one stone, of moose or buffalo meat!

† Yet was there one of them who complained he had not enough, and did not scruple to help himself to an additional supply whenever the opportunity offered: it would have taken twenty pounds of animal food daily to satisfy him. This man, Framond, being in other respects a very indifferent servant, was discharged the following year; and his place supplied from Mackenzie River by a young Maskegon, or Swampy Cree Indian, in the service, educated at Red River, and named James Hope, who was engaged by us at the same annual wages as our other middlemen, viz. £40 sterling.

their immediate masters with a familiar kindness surpassing what I have ever seen elsewhere, even in the United States; and their whole condition affords the strongest possible contrast to the wretched situation of the Russian "Promüschleniks," as described by Langsdorff. The nature of the climate and long journeys, it is true, demand hard labour *at times;* but it is labour voluntarily endured, and even physically less severe than the compulsory tracking on the rivers of Russia and China: while a great part of the year is passed in comparative idleness; and, if the voyageur finds the fatigues and hardships too great, it rests with himself to be released from them at the close of his three years' contract. I may here introduce a curious fact, that this class of men are found to remain longest in the poorer and colder districts; and that no sooner have they got into the best situations, than they become restless and desirous of change! It is, perhaps, a kindred feeling that urges the American backwoodsman, when he has cleared a farm and made himself comfortable, to sell his improvements, shoulder his axe, and march forward into the wilderness in search of possessions yet more remote. Now that we were fairly established, divine service was duly performed on Sundays, at which both Protestants and Catholics

attended. Our Canadians, like their countrymen in general, were deplorably ignorant; the Highlanders and Orkneymen, on the contrary, could both read and write, and the contents of the little library we had provided were in great request among them through the long winter nights. During the summer voyage we had laboured successfully to repress the practice of swearing, so common among voyageurs of every denomination.

The natives now began to come in more frequently, occasionally aiding our people in the laborious transport of the meat. To some we lent guns; all were plentifully supplied with ammunition; and many of the more industrious were furnished with blankets, shirts, and cloth dresses, instead of their own filthy deer-skins. Nothing was easier than for an active hunter to provide himself and family with these comforts; as he received, exclusive of all gratuities, a good price for his meat, which was usually delivered to us several days' journey from the establishment. These Indians always experience a kind reception from us. They sit round the fire while we are partaking of our morning and evening meals —in other words, breakfast and supper; for dinner, that "word of power" in other climes, was unknown at Fort Confidence.* When we

* At least as far as Mr. Dease and myself were concerned; for the men and families messed as often as they thought proper,

have eaten, we present them with the remains of our repast, which is, indeed, the common custom of the north. After meals we occupy the same fireside, chatting or smoking together; at night they sleep in our hall, and on winter journeys and hunting excursions side by side with us in the same encampment. Every circumstance indicates a kindly familiar intercourse; the natural result of which is, that the Indians are attached to the Company's officers, whom in common discourse they style their "fathers" and their "brothers." In our particular case I must frankly confess my surprise at the facility with which we acquired their confidence, for only in 1835 a cruel and unparalleled injury had been inflicted upon them by some half-breeds who disgraced the service. Three of these wretches (two of them Red River Catholics, the third a countryman of the victims,) sought a quarrel with a party of unfortunate Hare Indians about one of their women, whom they carried off; and attacking them unawares, after partaking of their hospitality, brutally massacred eleven persons of both sexes. The criminals were taken out for trial to Canada, where the ringleader, Cadien, escaped with the mild sentence of banishment, and his accomplices were acquitted! It is to be hoped that the Company

and were, as usual, much more difficult to please than their masters.

will persevere in their resolution to send no more of this caste to Mackenzie River.

It has, I understand, been sagely proposed by certain theorists to ameliorate the condition of the northern tribes by transforming a race of hunters into a pastoral people, through the domestication of reindeer. But the character of the aborigines would alone present an insuperable obstacle to the experiment. They entertain a rooted superstition that the taming any of the wild reindeer of their country would banish the whole race for ever from their lands. It was for this reason that, in 1817, Mr. Dease could not succeed in obtaining a couple of fawns from the Copper Indians at Great Slave Lake; nor were our applications at Fort Confidence more effectual. I was not sorry for it, as the poor animals could not long have been preserved from the fangs of the dogs—those indispensable assistants to white or red men.* Even were this prejudice overcome, the Indians would immediately and naturally inquire, "Why should we be bound like slaves to follow the motions of a band of tame animals, when our woods and barren

* In May 1839 our dogs drove off a pair of wolves that passed the house in hot pursuit of a large deer; took up the chase themselves; ran down, strangled, and devoured the prey on the ice a few miles to the westward.

grounds afford us moose, red-deer, buffalo, carriboo, and musk cattle; when our lakes and rivers supply us with fish, for the mere trouble of killing them?"

On the 1st of February, two servants and two Indians were despatched to Fort Simpson with our spring packet, containing letters, charts, &c. They were directed to take the shortest route, by M'Tavish and M'Vicar bays, and from thence to follow a chain of minor lakes, leading through the woody country to the southward, known to the Indians. From Fort Simpson they were instructed to return as soon possible, with dogs and sledges, carrying a small supply of moose-skins, and the irons for sledge-runners, required to transport our boats over snow and ice to the Coppermine River. At the same time we wrote to Governor Simpson, stating the probability of our having to employ *two* summers in exploring the coast eastward of Bathurst's Inlet. To provide for a prolonged residence within the Polar Circle, we addressed the gentlemen in charge of Athabasca and Mackenzie River, requesting an additional supply of pemican, dressed leather, dogs, birchwood for sledges, ammunition, and tobacco,—articles essential to our subsistence; as for everything else, we resolved to live like the natives. The cold continued excessive, with fre-

quent easterly gales, even when the thermometer stood below —50°; a circumstance that fearfully distinguishes our winter-quarters from those of former expeditions. West and even north-west winds commonly brought on snow and less severe weather. This is at variance with what obtains over a considerable part of North America, but may be accounted for by the situation of the place, in the margin of the woods close to the "barren lands." The appellation of Barrens, or Barren Lands, is given to the whole north-east angle of the continent from the 60th parallel of latitude, because that extensive region is destitute of wood. The winds that sweep over it are therefore more intensely cold than those which traverse the well-wooded country through which Mackenzie River flows. While engaged at various times during this winter in hunting excursions with Indians to the eastward, and in surveying the different routes to the Copper-mine River, I could not help remarking the increase in the severity of the cold, and the frequency of storms, when we got out into the hilly "barren lands." The lakes and rivers are there much earlier frozen, and it will be found that they also break up at a later period than those under the same parallel to the westward. The average depth of snow was about three feet, but

enormous drift-banks lay in the hollows of the mountains.

Ritch was sent in quest of wood for new oars, and for planks to repair the sea-boats; but, after a search resumed several days in different directions, he found only a few pieces fit for the former purpose, none for the latter. I subsequently fell in with some straight tall trees on the south branch of Dease River. The wood around Fort Confidence is stunted, knotty, and twisted into all manner of shapes—the deformed growth of frozen ages. From the eastern side of M'Tavish Bay, a distance of seventy miles, a quantity of dwarf birch was procured, for additional boat-timbers, snow-shoe frames, and axe handles.

March was scarcely less severe than February, the mean temperature of the whole month being 20° below zero.

On the 11th, at 5 A. M., occurred the greatest degree of cold registered during the winter. A spirit thermometer by Dollond (which shewed the *highest* temperature of any at the place, and was that always employed,) stood at 60° below zero; and another, of older date, brought from Fort Chipewyan, at —66°. This intense cold was accompanied by a fresh westerly breeze, which several of our people had to face that

morning, returning with meat from M'Tavish Bay. Spite of their deer-skin robes and capots, their faces bore palpable marks of the weather; and, when they reached the house, not a man was able to unlash his sledge till he had first thoroughly warmed his shivering frame.

The winds were no less constant and piercing than during the preceding months, but blew more frequently from the westward. In the early part of the month our last fishery on the south side of the island entirely failed; and, after supplying for a time with meat-rations the men who were stationed there, they were withdrawn, and appointed to other duties. Lines were re-set in the strait, but their produce did not even repay the baits employed, and they were again taken up. Fortunately our Chipewyan hunters and the native Indians vied with each other in amassing reindeer and musk-ox flesh; and our six sledges of dogs, with each a driver, were almost continually employed, bringing to Fort Confidence the means of existence. Le Babillard, an Indian frequently mentioned in the narrative of Franklin's last expedition, now approached with his party from the southward, and opened a communication with us. About the same time two young Indians arrived with news from Forts Norman and Good Hope. They were full of a

marvellous report, current among the natives, of an approaching change in the order of nature. Among other prodigies, a race of men had sprung up from the earth whose eyes and mouths were placed in their breasts. These monsters practised an unbounded hospitality, having always on the fire a gigantic copper cauldron, containing the carcases of five moosedeer! and the appropriate scene of this wild tale was the Horn Mountains, on the west side of Great Slave Lake. The whole story afterwards turned out to have originated in a dream.

On the 25th the people despatched with our February express returned from Fort Simpson, having performed the journey in nineteen days. They brought us our letters from home, together with intelligence of the demise of his Majesty William the Fourth, and the accession of our gracious sovereign Queen Victoria; which news had reached the Hudson's Bay ships before they sailed from the Hebrides, in July. We at the same time received a distressing account of the fatal ravages of the small-pox among the Assiniboines of the Saskatchewan. Thirty men of that tribe had crossed the plains to the banks of the Missouri in the summer of 1837, with the view of stealing horses. They found the unfortunate natives of the Missouri dying by hundreds of

that terrible disease, which was introduced by an American steamboat, and, in the mad hope of assuaging the fever, casting themselves into the deadly stream. Under such circumstances they had no difficulty in making themselves masters of one hundred and sixty horses, and with this rich booty set out for their own camp. But the distemper had communicated itself to them, and ere long broke out on the way. Two-thirds of the robbers perished, and the survivors were obliged to abandon their ill-gotten spoil. The Company's people at Carlton had been all vaccinated; yet the contagion was communicated from the Assiniboine camp, and two of the servants fell victims to its malignity. It is with sincere pleasure I add, that the humane precautions taken by Chief Factor Rowand, and the other gentlemen in the Saskatchewan, to vaccinate the Crees, saved the whole of that valuable tribe from the disastrous consequences of the malady, which happily did not penetrate farther north. We afterwards learned that it spread throughout the Plain tribes along the American lines to the Rocky Mountains; that it broke out on the north-west coast, and committed dreadful havoc among the sanguinary tribes from Vancouver Island northward, and at the Russian settlements. Of the Mandans of the Missouri it was said that

only twelve remained, and that a party of Sioux were on their way to extinguish this feeble remnant of a once powerful tribe. So much for the *generosity* of savage warfare!

On the 27th I set out, with two men and four dogs, to explore the barren grounds stretching from Dease River to the Coppermine, and to determine the most practicable route for the transport of our boats, baggage, and provisions. For three days we ascended Dease River, in a north-easterly direction, carefully tracing its course, which is very crooked. The ice-marks visible upon the trees and banks indicated the height of the water when liberated in the spring, but at this period we found it everywhere frozen to the bottom. The woods grew thinner and more stunted as we advanced; and on the third evening we encamped in a small cluster of dwarf spruces, barely sufficient, in number, to yield us firing, and brush for our beds. In the night a gale sprang up from the north-east, with a tremendous storm of snow-drift, which almost buried us alive, as huddled together with our dogs we lay exposed to the fury of the tempest. It continued unmitigated throughout the following day, and we sought a miserable screen behind our sledges, placed on edge in the deep snow. To the Arctic traveller it appears almost incredible

how people perish, under similar circumstances, in the climate of Britain! The position of this encampment is in lat. 67° 15′ N., long. 117° 50′ W.

On the 31st the wind was still strong and penetrating; but, the snow having ceased, we were glad to continue our journey. As we were now about five miles to the northward of the point where Dr. Richardson and party, in August 1826, crossed a small stream, which I supposed our boats might descend in June to the Coppermine River, I changed our course to east-south-east, with the hope of falling upon it in the evening. The difficulties of the route prevented this; but, from the top of one of the barren, rugged hills among which we were travelling, I espied a valley to the northward, containing several lakes, and, what was of infinitely more consequence to us, a wood to encamp in. In this oasis we were detained another day by a heavy fall of snow. The night was clear and very cold; and next morning, 2nd April, we had to face a severe easterly wind. We proceeded through a sort of pass among the hills, where we witnessed a whirlwind, which we all, at the first distant view, exclaimed to be the smoke of a large fire. As we passed near it, our respiration was almost suspended by the rapid motion of the air and the

excessive cold. A high and steep descent brought us suddenly upon the banks of the streamlet we sought, where a solitary cluster of trees doubtfully indicated its existence. Here we breakfasted, and I obtained the lat. 67° 11′ 17″ N., long. 117° 5′ W., variation 49° 30′ E.* Starting again we travelled sixteen miles, partly along the scarcely distinguishable streamlet, partly on the neighbouring hills, and at 7 in the evening reached some woods, scarcely taller than a man, but the first we had seen since noon. Immediately above this spot the stream expanded into a lake, by the junction of a branch from the northward; and was named Kendall River, in compliment to Lieut. Kendall of the former expedition. Parhelia were constant almost all day, and frequently appeared during this journey. The succeeding day was fine; and we traced the stream, now somewhat increased in size, but, like Dease River, frozen to the bottom, for fifteen miles,

* A stranger would have been sorely puzzled to know whether he was about to descend or ascend the brook. The following was our method of ascertaining this important point: Through the snow, which almost choked up the valley, a few willow tops protruded here and there. To two or three of these were attached little balls of roots and grass, that had been carried down by the high water of the preceding spring. These adhering to the *lower* side of the twig, proved that our faces were turned *down* the stream.

when it opened upon the Coppermine through a narrow gorge of perpendicular rocks. The noble view of the river, with its frozen windings through that wild waste of snows and mountains, repaid our fatigue; and we proudly drank of its melted ice, within fifty miles of the northern sea. I procured observations, which place the confluence of the tributary stream in lat. 67° 7′ 1″ N., long. 116° 21′ 15″ W., variation 48° E. The temperature at Fort Confidence was —20°; here it might be —25° or —30°. We returned to sleep at our encampment of the preceding night. Some white partridges were shot in the course of the day; but the deer kept higher up on the hill-sides, where, the snow being carried off by the winds, they find least difficulty in getting at the moss—their favourite food.

On the 4th we again breakfasted at the place where we had first fallen on the stream. Here our dogs luckily found the half-devoured carcase of a deer, which had been driven over the cliffs by wolves, four of which ravenous animals were scared from their feast by our approach. This was a most acceptable windfall, as our provisions were at a very low ebb. Conjecturing that the brook, by a circuit to the southward, might issue from the lakes where we were stopped on the 1st, (which it approaches, but which

afterwards proved to be the source of a branch of Dease River,) I proceeded to ascend it for six miles farther, in a south-westerly direction, and encamped in the last and only clump of pines visible from the summit of a hill. The following day was extremely cold, enhanced by a piercing head wind, which assailed us as we traversed a bleak, elevated region. I prosecuted the ascent of the brook for another league, in a southerly direction, till it became lost among sharp rocks and frowning precipices. Leaving these on our left, we climbed a wild range of hills; and travelling over their uneven summits, west-south-west, for thirty miles, the snow cast up into waves by the vehemence of the winds, we reached at a late hour the welcome shelter of the woods, on the south branch of Dease River. The descent from the mountains to the river was animated by numerous herds of reindeer, and we had no small trouble in curbing the eager spirit of our dogs.

Next morning, the 6th, the temperature was —31°, with a sharp easterly wind: we reached the house about 7 P.M. There I found three Indians, who offered to conduct us by a longer but more level route than any we had traversed. I accordingly mounted my snow-shoes again on the 9th, at the head of six dog-sledges, with

each a driver; two extra men to remain at the station till the passage of the light boats in June, and the Indians to act as hunters there during the interval. Having already thoroughly examined the river, I preferred striking out into the plains on its northern side; these we generally followed, crossing the river for the last time, in lat. 67° 22′ 14″ N., long. 117° 42′ 45″ W., at a little lake a few miles from its source. From thence a height of land of six miles, north-north-east, led to a narrow chain of lakes, that wind for upwards of thirty miles in a south-easterly direction through a dismally barren, rocky country, producing not a tree or shrub, and seemingly unfrequented by any living creature. During the preceding day's march musk-cattle were very numerous, and we succeeded in shooting three as they filed off to the high grounds. We saw no reindeer; the depth of snow, which averaged not less than three feet, hard packed in the plains, preventing them from frequenting this region, of which the shaggy musk-bull and white wolf appeared to maintain exclusive possession. The Dismal Lakes, as I knew from their trending, give rise to that northern branch of the stream noticed by me on the evening of the 2nd; and we encamped at the very spot which I then marked as the most proper for

forwarding our provisions and baggage to, over the snow, though my new companions, instead of a river, could perceive only "a cairn of stones." The portion we had brought with us, amounting to about a third of the whole quantity, I now consigned to the two men appointed to guard it. They were furnished with leather lodges as a defence against the cold, which was still very great; the thermometer in the night frequently falling below —30°, accompanied by violent winds. Next morning we set out on our return. The whole journey occupied seven days; viz. four going laden, and three returning light, the distance being ninety-five statute miles. By often repeated trials we had found the climate of the barren lands, even a single day's march eastward of Fort Confidence, far more severe than at that place, which lies low and comparatively sheltered. On the present occasion two of our best dogs got frozen. The hard snow was extremely galling to the feet, and several of the party suffered from snow-blindness. We saved our people from that painful evil for the rest of the season by constructing short tubes of wood and bark, covered at the outer end with green gauze, and worn as shades. The Indians, unlike the Esquimaux, are too stupid to contrive any precaution against ophthalmia; almost every one who arrived was

afflicted with it; but, by dropping laudanum in their eyes, in two or three days a cure was always effected.

One of our young Chipewyans had the misfortune to lose the tip of a finger from the bursting of his gun, in consequence of the ball running forward. Several guns burst in the chase from the same cause, but happily no other personal accident ensued. The increase of daylight was strikingly rapid, and by the middle of the month the twilight was perceptible at midnight. The weather, however, continued very severe; the thermometer, so late as the 20th of the month, shewing 26° below zero. The Indians left with the men at the Coppermine station were consequently unable to hunt upon the mountains, and the most active of them got badly frozen in the leg.

On the 24th, the thermometer rose *at noon* to the freezing point, for the first time since the 17th of October, a period of six months and a week! The *mean* temperature for the whole of that long and dismal interval is 14° below zero, or 46°* of frost. Our people being all assembled, we gave them a dance in celebration of St. George's day, and before despatching our last packet to Mackenzie River.

* By the old Ath^{a}. thermometer, 18° or 50° of frost.

Among the Indians who came in about the close of the month, was a family, the youngest member of which, a boy scarcely two years old, and still unweaned, walked on snow-shoes! I had the curiosity to measure them, and found their dimensions exactly two feet in length, including the curved point, by six inches at the broadest part. The little urchin was so fond of these painful appendages, that he hugged them as a plaything, and bawled lustily when his mother attempted to take them from him.

Now that the constant daylight renders the aurora borealis no longer visible, I shall make one or two general remarks regarding it. Its most common appearance at Fort Confidence is an arch with little motion, passing through the zenith, and spanning the heavens from north-west to south-east. Now, since the variation of the compass is here little more than four points easterly, it follows that there is a tendency in this remarkable phenomenon to dispose itself at *right angles to the magnetic meridian.* In the depth of winter, thin white clouds, seen during the short imperfect daylight, in many instances proved to be the aurora, which also not unfrequently appeared through a hazy sky. Its displays were seldom very brilliant, and it hardly ever exhibited those vivid prismatic tints which

I had often admired in lower latitudes. The solar radiation during this month was very powerful, the universal covering of snow strongly reflecting the sunshine. Two of Dollond's thermometers, having respectively a northern and southern aspect, both freely exposed to the wind, and neither blackened, differed at mid-day from 20° to 40°. In the month of March, on three occasions, the difference exceeded 40°; whereas in January, before the re-appearance of the sun, the southern thermometer sometimes stood lowest, and never shewed an excess of more than four degrees. Not until April did we enjoy a view of the genuine blue sky, for throughout the colder months the lower region of the atmosphere is suffused with icy spiculæ—the offspring of intense congelation—which dim the splendour of the firmament. To the same cause may be referred the frequency of mock suns and halos, which were often seen hanging over the opposite island, apparently not a mile distant.

The month of May commenced with the temperature at zero. It did not again fall below that point, but froze sharply almost every night, and during many of the days. The weather generally was cold and boisterous, and the mean temperature of the month was 30°. The easterly winds were again predominant. I was absent

from the establishment, with two men, for the first twelve days of the month, on a survey of that arm of the lake which I discovered and partially examined in December. It is bounded on the eastern side by a continuation of the primitive rocky range of hills seen by Dr. Richardson.* These attain an elevation of six or eight hundred feet, where M'Tavish Bay approaches closest to the Coppermine River, in lat. 66° 40′ N., long. 117° 20′ W. This terminating point being nearer the river, by at least one half, than Fort Confidence, it was my intention to examine the interjacent country; but, upon proceeding some distance, it became so rugged and mountainous as to be impracticable with dogs and sledges, far less with boats.* Thus concluded my winter excursions on Great Bear Lake and the barren lands, exceeding in all a thousand miles.

On the 13th of May I laid aside my snow-shoes; but our last Indian couriers to Fort Simpson started on the 15th with these necessary appendages, which continued in use by the natives during the remainder of the month. I had formerly walked in the depth of winter

* The distance we travelled, returning by Cape M'Donell, was three hundred statute miles, which will give some idea of the magnitude and grandeur of our inland sea.

from York Factory on Hudson's Bay to Red River, and, again, from Red River to Athabasca,—a distance little short of two thousand miles,—wearing only an ordinary cloth capot, and have accomplished fifty miles in a day. Here, however, myself and my companions soon found that the wanderer within the unsheltered precincts of the Polar Circle must be far otherwise provided. Accordingly, on our distant excursions, we usually assumed capots of dressed moose-skin, impervious to the wind, or of reindeer hide with the hairy side outwards, and were provided with robes of the latter light and warm material for a covering at night, when, to increase the supply of *animal* heat, our dogs couched close around us. Yet in a stormy, barren, mountainous country, where, in many parts, a whole day's journey intervenes between one miserable clump of pines and the next, we were often exposed to suffering, and even danger, from the cold; and several of our dogs were at various times frozen to death.

In the early part of May Fort Confidence was visited by a party of twenty-seven Hare Indians from Smith Bay, with a small but acceptable supply of provisions, for which they were liberally recompensed. Our long-expected winter packet from the southern parts of the country

was brought on the 9th, by Indians, viâ Marten Lake. Not the least valued part of its contents was a file of that excellent paper the New York Albion, with some numbers of the London Times, sent us by our worthy friend Chief Factor Christie. Those only who are cut off from the rest of the world can fully appreciate such marks of attention.

On the 15th a solitary goose, the first harbinger of spring, flew over the house; followed, two days after, by some Canada, Hutchin's, and snow geese. A few laughing geese, swans, and northern divers made their appearance somewhat later; also ducks of the smaller species. But the whole number of fowl that passed was inconsiderable, more being shot at Athabasca in one day than we procured altogether.

On the 18th a man and boy arrived from a camp of strange Hare Indians, whom they had quitted to the westward in a starving condition. We immediately sent them a quantity of pounded meat, which was the means of saving their lives; and on the 27th the remainder of the party, twenty-two in number, chiefly old men, women, and children, came to the establishment. They darted like vultures upon a kettle of meat which was prepared in the hall; but I must do them the justice to say, that, despite their

hunger, they made a fair distribution of the food, which is more, I suspect, than Europeans similarly circumstanced would have done. An old man, a woman, and two children had died in the course of the winter; and one blind old man, brought to the house, was hauled on a sledge, or led with a string, and sometimes carried by his wife and daughter. The party had separated from the rest of the tribe; and the number of men capable of hunting being disproportionally small, caused the misery that we had the satisfaction to relieve. Our own stock of food was meanwhile fast wasting away; for Dog-ribs, Hare Indians, and Chipewyans had now all congregated around us, and, instead of bringing us assistance, many of them drew rations from our store. Besides such occasional assistance, we constantly had some old or helpless persons left upon our hands.

No means were neglected to procure subsistence for ourselves and the natives. Nets were set in Dease River, but produced next to nothing; ammunition was liberally distributed, and, towards the end of the month, a few straggling deer were killed. About the same period the rapids in the lower part of the river broke up; and our sea-boats, which had been thoroughly repaired and strengthened, were dragged over

the ice to its mouth, to be in readiness for the moment that the ascent of the stream should become practicable. A messenger having arrived from a lake about a day's journey to the northward, reporting an abundant fishery under the ice, we despatched the whole of the lately-starving Hare Indians thither. The Dog-ribs and our Chipewyan hunters at the same time prepared to separate and disperse themselves for the summer over the best hunting-grounds to the eastward. Their departure in the beginning of June was a twofold relief to us, as we had some preparations to make for our approaching voyage. I must not close this part of the narrative without bestowing a just encomium on the generally docile character of the natives of Great Bear Lake. They soon become attached to white men, and are fond of imitating their manners. In our little hall I have repeatedly seen the youngsters, who were most about us, get up from their chairs, and politely hand them to any of our people who happened to enter; some of them even learned to take off their caps in the house, and to wash instead of greasing their faces. Their indulgent treatment of their women (who indeed possess the mastery) was noticed by Sir John Franklin; I wish I could speak as favourably of their honesty and veracity.

The position of Fort Confidence, as determined by a variety of observations, is in lat. 66° 53′ 36″ N.; long. 118° 48′ 45″ W. The magnetic variation, in October 1837, was 48° 30′ E.; the dip of the needle (in June 1839), 84° 48′ N.

CHAPTER X.

Ascent of Dease River.—Passage of the Dismal Lakes on the Ice.—Dangerous Descent of the Coppermine.—Flight of the Esquimaux.

HAVING, after repeated missions up Dease River, ascertained, on the 6th of June, that the first flush of water had passed off, and the ice ceased descending, we immediately put the party in motion. Leaving Ritch and two men at Fort Confidence, we set out with only four men per boat, two having (as already mentioned) been stationed at Kendall River in charge of the provisions for the coasting voyage. Our very limited personal baggage, provisions for the journey to the Coppermine, the canvass canoes, and snow-shoes for the whole party in case of being surprised by winter on our return, were carried over the ice to the mouth of the river, where we encamped. In that sheltered spot the first signs of vegetation had appeared, and the catkins of the willow were fully an inch long. On

the lake, the ice was still from four to five feet thick.

In the forenoon of the 7th was commenced the ascent of Dease River; the weather clear, but cold. The navigation proved a succession of rapids; and the banks, obstructed by willows and other trees, rendered the tracking very laborious. We encamped at a place where the stream has forced its way through a precipitous chasm, leaving a detached rock in the midst, to which our Orkney-men gave the name of "The Old Man of Hoy." Several large hawks and a numerous colony of swallows occupied the cliffs. The latter birds we afterwards found in a similar situation at the mouth of Kendall River. As they are never seen at Fort Confidence, it is probable that, in their passage northward, they avoid the frozen expanse of Great Bear Lake altogether, and make straight for their accustomed rocky haunts.

8th.—The fatigue of ascending the rapids, often waist-deep in the water, was aggravated by a hard frost and a piercing head wind. As we advanced, however, we found a good deal of still water, where the oars could be used. Enormous drifts of snow clung to the banks. In one place a fallen fragment had grounded in mid-stream, forming a temporary islet, upon which stood an

Indian mark, directing us to the carcases of two deer placed in a tree. As we approached the spot, another huge mass of snow tumbled down, and well-nigh put an end to all our discoveries. At 3 P. M. a shout issued from among the trees on the south side of the river; and a young Indian soon came forth, breathless with running, to inform us that the camp was situated some distance off, at the foot of a conspicuous hill. Ordering our people to put up for the night, we told the youth to guide us to it; which he did, through bushes, and swamps newly coated with ice. At the camp we found a scene of savage feasting, for the hunters had slaughtered a number of musk-cattle. These animals descend from the barren mountains at this period, and resort for a while to the borders of the woods, in order, it is said, to rub off their cumbersome winter coat of hair. The natives were here snugly lodged in leather tents, instead of their usual open huts of branches. It was pleasing to think that the comfort and abundance they enjoyed were in a great measure our own work, and the many smiling faces that crowded round us evinced their affectionate regard. After partaking the hospitality of the tents, we selected six young men to assist our feeble crews up the remainder of the river, and across the port-

age to the Dismal Lakes; and, with these auxiliaries, we returned to the boats at a late hour.

In the course of this day we shot several Canada geese, and found some of their eggs among the rocks: they had for some time deserted Great Bear Lake. The noisy pintailed and black diving-ducks were pretty numerous on the river, as were the willow grouse in the bordering woods. The latter were now pairing; and the male, with his white plumage and rich brown-coloured neck, looked extremely handsome, as, perched on the top of a tree, he crowed and called to his mate. The marks of vegetation observed at the *mouth* of the river had disappeared; the small lakes were everywhere frozen; snow still lay in the woods, and clothed the hill-sides.

On the 9th, after passing the south branch of the river, which falls in from the mountains in lat. 67° 1′ N., long. 118° 12′ W., we ascended during the rest of the day about fifteen small rapids, though the Indians had assured us that the whole was still water. The intervals between them are, however, smooth and deep; the stream flowing through a sandy plain thinly skirted with wood, and bounded by a range of snow-clad hills on either hand. Our young savages very willingly received civilized names, (John, Louis, Pierre, Michel, Hunter, and Stranger,) but it was

a less easy matter to teach them to keep time with the oar. Many deer were seen, and one small herd was browsing so near the bank that the Indians gave them chase; but, the foolish fellows having in their hurry slipped in balls over charges of shot, two of their guns burst, and one of them narrowly escaped a shattered hand. The weather was dark and cold, and the water had fallen four or five feet from the ice-marks. In arriving at a rapid much stronger than the rest, one of the boats sustained some damage from the sharp stones: it was repaired in the course of the night.

10th.—Marmot Rapid, so called from the number of those little animals' burrows in the neighbourhood, occupied us some time this morning, and there were several shallows between it and my tempestuous encampment of 29th March. When we halted, soon after, for breakfast, our quick-sighted hunters espied a musk-bull feeding at some distance among the willows. After they had fired several shots at him ineffectually, he took the direction of the boats; but, stumbling into a deep creek, swam out to the river, where he was wounded in the act of crossing. The animal instantly turned about and endeavoured to climb the bank where we stood, his eyes darting fire, and his nostrils distended with pain

and rage; but he soon fell pierced with bullets. We found his flesh very good. A pair of large white wolves were prowling about the river; and the ravages of the barren-ground bear (ursus arctos) were observed in several places. Beyond this the stream divides into four branches, of which we chose the largest, flowing from the northward through a sterile waste. It is a mere sandy rivulet; in some places a fathom deep, in others not a foot. At length angular granite rocks began to project from the bottom; and at 8 P.M. we encamped at the foot of a succession of stony rapids.

All next day we were detained by a storm of wind, snow, and rain. I noticed the first moss in flower, its lowly blossoms flourishing unharmed amidst the war of the elements. The few dwarf withered spruces within reach of our encampment were expended in firing.

In the forenoon of the 12th the storm abated, and we resumed our route. In ten hours we advanced six miles, nearly half of which was portage-work, with a fine level reindeer path following the windings of the brook. This brought us to the little lake which I had in the winter fixed upon for the commencement of the portage across the height of land. Up to this point, which is not far from its source, Dease

River, including all its windings, measures about seventy miles, and, considering its small size, certainly exceeded our expectations, though it is only in the month of June that it is navigable any distance even for small canoes.

The next three days proved fine, and the portage, which is six miles in length, was nearly surmounted. The boats were dragged over, one at a time, by all hands, and the baggage deposited half-way. We pitched our tents on the side of one of the conical shingle hills that form the approach to the Dismal Lakes. On the banks of the little lake already mentioned I chanced to find a white wolf's den, containing four fine brindled pups. I immediately took possession of the prize, and carried them on my back across the portage, intending to send them to Fort Confidence by the Indians, and to train them to the sledge. Their dam, attracted by their cries, rushed to the rescue, and lost her life; the more cowardly male contented himself with howling all night on an adjoining eminence.

The 16th brought a tempest of wind and snow from the north-east, which rendered our exposed position intolerable. My young pets were peculiarly sensitive to the cold; and, though I carefully wrapped them up in my cloak, nothing less

would serve them than to crawl under the blankets and huddle beside me. They were coaxing little creatures, and, having prodigious appetites, I found no difficulty in inducing them to change their diet.

On the 17th the ground was hard frozen; but, the wind decreasing in the afternoon, we carried forward our baggage to the Dismal Lakes, where the ice lay as solid as in mid-winter, and the hills glistened with snow. A branch of the Copper Mountains stretches along the northern side of these lakes, out of view, except at the lower part near Kendall River, where the natives report having found large masses of metal. Some metalliferous stones were picked up here, but we had no leisure to prosecute our researches farther.

At 4 o'clock next morning, having fixed the boats firmly upon stout iron-shod sledges brought with us for the purpose, and placed in them the oars and baggage, we hoisted the sails to a fair wind, and, placing the crews at the drag-ropes, set out at the rate of two knots an hour over the ice, colours flying. This extraordinary spectacle will long be a subject of tradition among the natives. The snow still adhering to the surface of the lake much impeded our progress, but could not damp the ardour which our strange

and successful march excited. With the aid of the breeze we advanced fifteen miles, nearly half the length of this chain of lakes, and encamped in a little bay sheltered by an island, where we collected willows enough to cook our supper. The weather continued very cold. Stones, placed like Esquimaux marks, appeared on the summits of the hills, and a human skeleton was found between two rocks.

On the 19th, at 3 A.M., we were again on the lake, crossing on snow-shoes the deep and partially thawed snow-banks that lined the shore. The wind was adverse, and the ice rough, but now almost bare. In two open sandy narrows, between the lakes, the boats were taken off the runners, and committed to the water; and after traversing the last lake, three miles long, they were finally launched into their own element. A single bend of the stream brought us, at 3 P.M., to our provision station, where we were delighted to find Flett and Morrison safe and well. Their hunters had latterly been tolerably successful in the chase; and two of these active fellows consented at once to accompany us on our voyage, notwithstanding their dread of the Esquimaux, and of the unknown perils of the sea. Both were Fort Good Hope Hare Indians, and were named Larocque, and Macca-

conce (Anglicè, Little Keg), and proved in the sequel no contemptible auxiliaries. We made them clip their shaggy locks; and all hands clubbed to equip them in thorough voyageur costume, which wonderfully improved their outward man.

Part of the following day was occupied in trimming the boats, and embarking the provisions, which comprehended twenty-eight bags of pemican, six hundred-weight of flour, and about three hundred pounds of dried venison, an ample stock for three months. The six young Indians, who had rendered us such valuable aid, received notes on Fort Confidence to the value of a beaver-skin each for every day of their absence from the camp, besides presents of tobacco, shoes, &c., and departed well pleased with our liberality. The day was beautiful, and at 2 P.M. we commenced the descent of Kendall River. It is little better than a series of rapids, many of them strong; but the expertness of our crews carried us triumphantly down. As we approached the main river, large banks of snow and ice overhung the stream; and, on our emerging from the steep rocky chasm through which it rushes into the Coppermine, our surprise may be imagined at beholding the ample channel of the latter—there dilated among islands—still covered with ice.

We encamped on the same spot where I had breakfasted on the 2nd of April. Our arrival was evidently premature; but we had now achieved what the men had long regarded as one of the most dubious and difficult portions of our enterprise, and they were in high good-humour on that account. As for myself, my repeated winter journeys had entirely satisfied me of the practicability of the route in the spring, and they were the means of ensuring our success. The temperature this evening rose to 62°, and a few feeble musquitoes began to flit about.

On the 21st a strong and warm south wind blew. Kendall River became turbid, and rose upwards of two feet. Great havoc ensued among the ice, and the open lead of the Coppermine, which yesterday appeared a mere thread, now expanded into a rapid stream. We made excursions along its banks, and two deer were shot.

22d.—Considering the passage practicable, we quitted our harbour at 10 A. M. The current bore us with great velocity through the yet narrow channel between the fixed ice and the steep western bank of the river, where there was no possibility of landing. A few miles lower down the stream contracts; and the ice was gone, leaving a tremendous wall on either side. We took advantage of an occasional eddy to scramble

ashore in pursuit of reindeer and musk-cattle, which were grazing in every little valley. A fresh breeze from the north favoured our approach; and the heedless deer were sometimes feeding so near the brink, that we fired at them out of the boats as we glanced past. It was princely sport, and a supply of venison for several days rewarded our exertions. These deer were all lean bucks; the does being already on the coast, casting their young. At length quantities of ice came driving down, disputing the passage with us, and rendering the descent of the narrow, crooked rapids extremely hazardous; for, besides what was visible, we several times struck against water-logged masses that were floating down *beneath* the surface. It need not be thought extraordinary that ice, saturated with water, should sink, like timber in the same condition. In the beginning of summer, when the porous and dissolving ice has thus attained the same specific gravity with the supporting element, and trembles as it were in the balance, any unusual *agitation* is sufficient to cause its submersion. In this way it often happens that large lakes, which in the evening are covered with ice, after a windy night, present next morning a perfectly clear surface to the anxious traveller. At other times, for the same reason, the

ice of lakes, which in calm weather only breaks up when thoroughly decayed, as soon as it has entered the rapid current of a river almost entirely disappears. The ice which covers the rivers themselves being, on the contrary, rent by the force of the current while yet comparatively sound, is usually carried down a great distance, even to the ocean. At 5 P. M. we reached the head of a formidable rapid, where, after the cargoes had been carried for nearly a mile, the boats were run down safely, though half filled by the heavy waves that broke over them. A rocky point, which turned aside the torrent, offering a secure harbour, we encamped. During the night a vast quantity of ice mingled with drift wood drove past, and, blocking up some of the contractions of the river below, occasioned a sudden rise in the water.

We dared not move during the two following days on account of the continued and swift descent of the ice. Though the sun no longer set, a cold fog from the sea came up the valley of the river every night.

Tired of delay, we resolved to start at all hazards on the 25th, and pushed out at 8 in the morning. From Sir John Franklin's description of the lower part of the Coppermine, we anticipated a day of dangers and excitement; nor were

we disappointed. Franklin made his descent on the 15th of July, when the river had fallen to its summer level; but we were swept down by the spring flood, now at its very height. The swollen and tumultuous stream was still strewed with loose ice, while the inaccessible banks were piled up with ponderous fragments. The day was bright and lovely as we shot down rapid after rapid; in many of which we had to pull for our lives, to keep out of the suction of the precipices, along whose base the breakers raged and foamed with overwhelming fury. Shortly before noon we came in sight of Escape Rapid of Franklin, and a glance at the overhanging cliffs told us that there was no alternative but to run down with full cargo. In an instant we were in the vortex; and, before we were aware, my boat was borne towards an isolated rock, which the boiling surge almost concealed. To clear it on the outside was no longer possible; our only chance of safety was to run between it and the lofty eastern cliff. The word was passed, and every breath was hushed. A stream, which dashed down upon us over the brow of the precipice more than a hundred feet in height, mingled with the spray that whirled upwards from the rapid, forming a terrific shower-bath. The pass was about eight feet wide, and the error of a

single foot on either side would have been instant destruction. As, guided by Sinclair's consummate skill, the boat shot safely through those jaws of death, an involuntary cheer arose. Our next impulse was to turn round to view the fate of our comrades behind. They had profited by the peril we incurred, and kept without the treacherous rock in time. The waves there were still higher, and for a while we lost sight of our friends. When they emerged, the first object visible was the bowman disgorging part of an intrusive wave which he had swallowed, and looking half-drowned. Mr. Dease afterwards told me that the spray, which completely enveloped them, formed a gorgeous rainbow around the boat. After discharging the water shipped, we continued our descent, till, at 2 P. M., we were arrested, about a mile above the Bloody Fall, by a barrier of ice stretching across the river. Putting about, we were fortunate in finding a safe eddy under some steep white earth cliffs, and encamped on a grassy plain stretching out from their base, and affording the double advantage of drift wood and a brook of clear water. We eagerly climbed the highest hills, and gazed on a wide expanse of sea covered with a dazzling sheet of ice, dotted with dark rocky islands; while far north rose the lofty

headlands of Cape Kendall and Cape Hearne, the latter blue in the distance. The Bloody Fall itself was free; but immediately below it, and from thence to the coast, the river was choked with ice. We found no recent traces of Esquimaux at the fall; but next day many tracks were seen in a plain to the west of the Coppermine, lying between it and a fine deep stream flowing to the northward. This latter river here approaches within two leagues of the Coppermine, and seemed equally large; a short distance higher up it bends off to the westward. Its banks are clothed with willows, and its course appeared tranquil. We had much pleasure in naming it Richardson River, after that resolute and scientific traveller. Several old camping-places, sledges, pieces of wrought wood, &c., were found on the adjacent hills. Various flowers were here in bloom; and, in low damp situations, the verdure of grass and willows relieved the eye, in the midst of ice and barrenness. A female marmot, big with young, was caught, and would soon have become tame, could we have conveniently kept her. The lively little creature seemed to feel quite at ease under a reversed tin dish, till released to join her mate, who, from an adjoining heap of stones, occasionally testified his impatience at her captivity by a sharp shrill whistle.

The bar of ice between us and the Bloody Fall having broken up, two men were despatched to the coast on the 27th to examine the state of the ice. On their return, in the evening, they reported the river to be still blocked up; and that the sea-ice adhered firmly to the beach, without the least appearance of decay, or indication of water in any direction. They brought us a fine salmon-trout, which they had rescued from a bevy of gulls, engaged in the act of dragging it alive out of the river. The waters were still too high for setting our nets, but on the final liberation of the river, two days afterwards, they subsided rapidly. A gunshot below our encampment, the face of a hill, undermined by the stream, kept falling down in large heaps with a tremendous noise, and obliged us to remove the boats higher up, in shelter of the grounded ice. The remaining days of June were fine, but cool. Our hunters killed several deer: these, with some geese, which we shot, kept our stock of pemican almost untouched. My observations placed our encampment in lat. 67° 42′ 52″ N., long. (by lunar distances) 115° 49′ 30″ W.; variation 54° 17′ 30″ E.

July 1st.—After a halt of five days we descended to the fall. The portage occupied six or seven hours, the boats having to be carried

about half a mile. On its northern side we found two skulls, the sole remaining memorial of the atrocious massacre of the Esquimaux by Hearne's Chipewyans in 1772. Several ancient stone circles, indicating the camping-place of these ill-fated people, were quite overgrown with willows. Some of the wooden pegs of Franklin's tents of 1821 still stood in the ground; and, in the reach below, old ropes, tarpaulins, wrappers, &c., left by Richardson's party in 1826, lay scattered about. At the bottom of the fall the flat shore to the foot of the hills, several hundred yards from the river, was occupied by icy fragments, for the most part six feet thick. We proceeded to within three miles of the sea, when an accident obliged us to encamp. Numbers of laughing geese were hatching on the borders of the ponds and swamps in the adjacent plain. During the stillness of the night the roar of the Bloody Fall was plainly audible, although six miles distant. There was a hard frost at the time.

On the 2nd, one of the men, proceeding a little way along the coast, descried two tents of Esquimaux, but returned unseen by the inmates. Next day, Mr. Dease and some of our people, walking near the mouth of the river, suddenly came in sight of four Esquimaux, ap-

parently a man, a boy, and two women, who had just halted on a hillock to pitch their tents. Immediately on perceiving our party, the poor creatures took to flight; the women and boy wading across a shallow channel to an island lying in the mouth of the river, while the man embarked in the only kayak they had, and paddled out into the stream. Upon this, Mr. Dease advanced alone to the water-side, and made signs to the latter to come ashore. Strange to say, he complied; probably, from very fear. On landing, he broke off two spear-heads, and presented them, in token of amity, to Mr. Dease; who, in return, cut some buttons from his coat and gave them to his new acquaintance. They then sat down on the grass together, and a broken dialogue ensued, in which the Esquimaux pointedly inquired whether the white men were accompanied by their families; a circumstance that, in savage life, usually denotes pacific intentions. Mr. Dease evaded the question, but assured him of a friendly reception and liberal gifts at our encampment. The stranger was about six feet high, stout, and well-looking, with brown hair. He wore no labrets; and his tonsure was triangular, the apex being towards the back of the head. The interview over, to all appearance satisfactorily, he re-embarked in

his canoe. In a very short time he and his family appeared on the ice, which yet adhered to the island on the seaward side, and made off at a great rate towards a distant and lofty group of islands. On Mr. Dease's return, we removed to the vicinity of the spot where the fugitives had abandoned their property; which included a leather lodge; skins of deer and seals, for bedding, clothing, and boots; a kettle, lamps, and dishes, hollowed out of a soft grey stone; bows and arrows; an ice-trench, knives, and other implements, formed of native copper; pieces of whalebone; and various articles left by Dr. Richardson's party, such as tin canisters, pieces of gunlocks, strips of red cloth, a pencil, and some painted fragments of the Dolphin and Union. At the water-side lay an excellent wooden sledge, thirteen feet long and two feet wide, which they were towing up the river, after it had served to convey their baggage thither on the ice. There was also a quantity of deer's flesh in an almost putrid state. We gathered all these things together, and carefully covered them over with the leather tent, and with poles and stones. Four dogs remained behind; one of which was in the last stage of starvation, but soon recovered under our care. Though we supplied the poor deserted brutes with food, they continued shy of us, till

one night that a troop of six wolves pursued them to our tents, where they instinctively took refuge. In order to save these useful animals, and, if possible, restore them to their owners, we carried them with us on our quitting the river a fortnight afterwards.

The weather in the early part of the month was, for the most part, dark and stormy. The northerly or *ice* winds were piercingly cold, and charged with fog, snow, and deluges of rain, against which our tent, made of light inferior sheeting, formed a wretched defence: our men were rather better lodged.

On the 7th, Sinclair was sent along the coast to examine anew the condition of the ice. He returned from the mouth of an unfordable river, nine miles to the eastward, probably the same that Hearne ascended on his return, and which passes through a branch of the Coppermine. The ice everywhere lay solid and unbroken upon the very sand, affording no hope of a speedy liberation. Tracing up the stream, which inclined towards the Coppermine, he perceived on its opposite bank five tents of the natives; but when we made an attempt, two days afterwards, to open a communication with them, they and their habitations had disappeared.

The 8th being a calm mild day, the musqui-

toes commenced their assaults; and the deer, driven from the valleys by these persecuting insects, were seen crossing the ice to the numerous islands scattered without the river.

To vary the scene, we made an excursion on the 11th, with a light boat, to the westward, with the view of exploring the mouth of Richardson River, which I concluded to fall into the unknown bottom of Back's Inlet. After coasting five miles, we were stopped by the fixed ice; but from the summit of a lofty range of rocks we discerned in the north-north-west a piece of open water, undoubtedly caused by the influx of the stream. On the sandy beach were the tracks of nine Esquimaux, who had apparently passed in great haste a few days before, probably terrified by the distant report of our guns, or by falling upon some of our hunting-tracks. Could these poor creatures comprehend our kindly feelings towards them, they would be eager, like their western countrymen, to profit by our visit, instead of flying from us on every side. Upon the rocks were numerous stone circles, caches, and marks; and in a valley I observed a turf deer-pound of the preceding year. Here, again, we found some remains of Richardson's mahogany boats. Next day, one of our Indians, while out goose-shooting, came unawares

upon two Esquimaux, who were travelling from the eastward towards the Bloody Fall, where the season for drying salmon now commences. He took off his cap and waved it to them, but (as he acknowledged) running away at the same time; and the strangers seemed as little disposed for intercourse as himself.

On the 13th, the sun's lower limb almost touched the horizon at midnight. At this period the banks of the river were adorned with a profusion of flowers, which contributed to enrich Mr. Dease's herbal. The nets produced, during our detention, one hundred and forty fish, chiefly Arctic salmon, large salmon-trout, and tullibee; with a few methy, white-fish, red sucking-carp, and diminutive flounders. I obtained an excellent series of solar altitudes and lunar distances, which place the mouth of the Coppermine in lat. 68° 48′ 27″ N., long. 115° 31′ 15″ W.; being 37 seconds to the northward, 5′ 34″, or about two miles, to the eastward of the position determined by Sir John Franklin; but he was encamped on the west, and we on the east side of the river. The variation was 53° 47′ 54″ E.; being an increase of 7° 22′ 2″ since 1821, or 26 minutes per annum. There was but one diurnal tide, and the rise and fall of the water varied from five to seven inches. At this date I find,

by Ritch's journal, that the ice on Great Bear Lake was still perfectly solid, and continued unbroken till the beginning of August; which may be considered the average term of its disruption,* being a full month later than Great Slave Lake, between which and Athabasca there is a like difference.

On the evening of the 16th, having observed some signs of an opening in the ice to the eastward, we removed to an island lying outside the mouth of the river. Here I had a fine observation at midnight of the sun's upper limb, elevated just four minutes above the visible horizon; the height of the eye being eight feet, the temperature 38°, and the barometer assumed at 30 inches. The resulting latitude, using Lynn's admirable tables, is 67° 52′ 59″; the true position was 67° 49′ 54″. On this occasion, therefore, the *actual* horizontal refraction exceeded the *tabular* by 3′ 5″; indeed, during the succeeding morning, there was much mirage, indicating a highly refractive state of the atmosphere.† The

* The bay of Fort Franklin, at the head of the grand outlet to the southward, is clear of ice much earlier, but furnishes no criterion of its state on the main body and northern parts of this immense lake.

† The following year I frequently repeated these midnight observations, between the Coppermine and Cape Barrow, when

shores of these islands, and all the neighbouring coast, were abundantly stored with small crooked drift wood, brought down by the Coppermine river.

the result, for the most part, fell ten miles to the *southward* of the noon latitude, which corresponds with Dr. M'Kay's scale of corrections for the spheroidal figure of the earth.

CHAPTER XI.

Second Sea Voyage.—Difficulties and detentions amongst Ice.—Long circuit in Bathurst's Inlet.—Discovery of Copper on Barry Islands.—Boats finally arrested near Point Turn-again.

At 12hrs. 30min. A. M. on the 17th of July we commenced our second voyage on the Hyperborean sea. The morning was calm and fine; and, after pulling two or three miles outwards, round a field of ice, we found an open channel between Berens Isles and the main shore. That advantage would, however, have soon been lost, had not a gentle S. S.W. wind sprung up, and, while it detached the ice from the land, greatly accelerated our progress. At several points we had to lower sail and push through the streams of ice, at considerable risk to the boats. To our Indian companions the sea was indeed a new element. Almost the first living objects they saw, two young seals, (which they called sea-beaver,) excited their wonder, and, when we landed to breakfast on an island, they anxiously

watched an opportunity to possess themselves of these strange animals; but the lively little fellows would never approach within gunshot. Everywhere there were old marks of Esquimaux, but none recent. The beach was strewed with seaweed and mussel-shells—certain indications of a clearer sea, in some seasons, than that which we navigated last year. As the day advanced the weather became sultry, and we were tormented on the water by swarms of musquitoes. Reindeer and musk-cattle were seen. Some of the former, to escape the persecution of the flies, were standing breast-high in the water, or running upon and swimming amongst the ice. At 5 P. M. we were stopped by an impenetrable field, after having advanced thirty-five miles. The water during the whole of this day's journey was fresh, or very nearly so, owing to the contiguity and rapid dissolution of the ice, aided by the discharge of many small rivers and streams. Scarcely had we unloaded our boats, and drawn them up on the beach, when a violent thunderstorm, that had been for some hours gathering, burst over us, attended with torrents of rain.

Compact ice and continued rain detained us till 7 in the evening of the 19th, when the wind veering to the west-south-west opened a passage, and we set sail. A dense fog shrouded sea and

shore; and, after running ten or twelve miles, we found ourselves embayed in fixed ice, between a high, rocky island and the mainland. The broken ice was at the same time rapidly closing in upon us; but, by laborious efforts for two hours, we extricated ourselves from this critical situation, and safely landed to windward of the press at midnight. There were foot-prints of Esquimaux on the shore, about a week old; and the stone circles of five tents. Seven sledges, with a variety of other articles (including some of the wide-spread remnants of Dr. Richardson's boats), were laid up close at hand.

The receding tide having separated the ice from the beach, we set out at 10 o'clock the following night, and crept along shore for about three hours, when we again reached its unbroken limit. We pitched our tents on rugged rocks, surrounded by scenery of singular wildness and sterility.

On the 21st a sultry land breeze further disunited the ice, and enabled us, by cutting our way at the different projections, to make the circuit of a bay to the high, rocky cape which Franklin doubled on the 22nd of July, 1821. Here ice of immense thickness still clung to the crags; and in two or three places, where there

were deep water holes among the loose rocks fallen from the cliffs, large blocks of pure white ice were seen adhering to the bottom. Yet at noon this day the thermometer stood at 71° in the shade, and rose to 88° when exposed to the sun's rays. It was the hottest day of the brief Arctic summer. We encamped in a chasm or narrow valley intersecting the cape. Here we found the caches of six tents of Esquimaux, containing a quantity of blubber, some stone kettles and lamps, a variety of utensils, besides the spoils of musk-cattle, reindeer, seals, and white foxes. A striped cotton shirt, almost new, was wrapped up and preserved with especial care. Most of these things were placed on a shelf in the rock, about forty feet high, and inaccessible to any quadruped. They had formed a ladder with their sledges to attain this place of security. Though we examined their repositories on this and other occasions, in order to form an idea of their manner and means of living, we made a point of scrupulously replacing everything as we found it; and usually added any articles we could spare of our own, as an evidence of our good-will towards them. Like most of the others, this party had probably wintered upon islands—the most favourable situations for seal-hunting; and had lately

removed inland to pass the summer at fishing stations, or in places most frequented by reindeer and musk-cattle.

On the evening of the 24th we were at length able to double the promontory, but we did so at the imminent hazard of the boats. In this operation one of them got an upper plank and the wash-board split, from a squeeze between the ice and the rocks. With great labour we advanced two miles, and encamped in a little gravelly bay beside a cascade. The sun set for about three hours; and the new ice, which formed in the open pools, remained till late the following morning: the night was calm and serene. Our nets at these two last stations yielded only two small Arctic salmon, though these elegant fish were seen sporting about the mouth of every streamlet.

25th.—After several hours' preliminary cutting through the ice, we were enabled to move forward in the afternoon; and, by frequently repeating the same process, we effected an advance of five miles. There was an Esquimaux road upon the ice, and one of their stone traps was found where we encamped, near Port Epworth, the estuary of Tree River. We also remarked, while walking along the rocky shore, one or two places where seals had been trailed up by the indefatigable natives.

Our progress next day was comparatively unimpeded by the ice, which, under the influence of the continued fine weather, began to dissolve along the edge of the rocks, whose turnings and sinuosities we were, of course, obliged to follow. In crossing Gray's Bay to Hepburn Island we were met by a strong current from the eastward. A legion of gulls, with their young, occupied the clefts in the precipices of the island, which spring abruptly from the deep to a considerable height. The seals were unusually inquisitive, and we shot several; but, after struggling for a moment, the creatures invariably sunk before we could lay hold of them, leaving the water dyed with blood. Some days afterwards we fished up a small one in two fathoms, which had been shot through the head; and the Indians were gratified with its skin. From Hepburn Island we found a tolerably open lead to the mouth of a stream flowing into the bay, three miles from Wentzel River, and of similar size. Its waters were very foul, in consequence of traversing lofty mud-banks immediately after its descent from the naked granite hills that bind this iron coast. The roar of a distant cataract proclaimed the suddenness of this change in its career. The banks of this river seemed quite a nest of wolves; and we pursued two females, followed by half a score of

well-grown young. The mothers scampered up the highest rocks, whence they called loudly to their offspring; and the latter, unable to save themselves by flight, baffled our search by hiding themselves among the willows which fringe the stream. The leader of the whole gang—a huge ferocious old fellow—stood his ground, and was shot by M'Kay. At this place our only thermometer was unluckily broken. The mean temperature of the preceding part of July was 43·7°, being 7·2° colder than the same period at Fort Confidence; where, however, some deduction might fairly be made, in consequence of the impossibility of finding an open place for the *fixed* instrument, on which the sun's rays did not fall at some hour of his long daily circuit.

27th.—The manner of our journey to-day may be compared to the evolutions of an expert skater; for, except at the immediate margin, the ice lay fixed and immoveable in the almost innumerable little rocky bays, creeks, and coves which indent this part of the coast. In one place we had to carry boats and cargoes over a solid floe, that still reclined high and dry upon the rocks. The islands lying off the coast reposed amidst the glittering field as if they were gigantic stones set in enamel.

We advanced next day for three or four hours

in the same tedious and laborious manner, till the ice, now for the first time broken up and set in motion by a strong north-east wind, drove us ashore. During these last few days the boats sustained serious damage, and were now become leaky. Indeed, in our anxiety to get on, we subjected them to very rough usage. Often, when the ice was not quite firm enough to make portages with safety, we hauled the boats upon it; and, holding on by the gunwales, all hands continued jumping and pressing down till it began to yield; and, the boats sinking into the water, we scrambled on board, and by main force pushed aside the pieces thus separated. At other times, one party was stationed upon the rocks, with iron-shod poles, to shove against the ice; another upon the ice, to shove against the rocks; and, when an opening the breadth of the boats could be thus formed, the remaining hands passed them through, one at a time: those with the poles holding on with all their might, lest the ice should close, like a pair of nut-crackers, and deprive us of the means of either advancing or retreating. On this part of the coast many reindeer paths were found, leading from the interior to the sea; from which circumstance, and from our seeing, up to this time, males only, I infer that the females pass by these roads early in the

season, and, crossing the ice, bring forth their young upon the islands, where they are more secure than on the continent.

The wind having fallen on the 29th, and left a practicable channel, we at last doubled the rugged and rocky Cape Barrow. On the top of rocks, upwards of a hundred feet above the sea, clam-shells were found, and some small specimens of that round prickly sort of shell called the "sea urchin," which must have been carried by birds to such an elevation. These, with cockles, muscles, periwinkles, and seaweed, abounded here, and in many other places on the beach. I am therefore astonished that Franklin's party should have seen shells in one spot only—the day they left the Coppermine River. The ice on Coronation Gulph being still perfectly solid, we were compelled to coast along the southward, till we should find a passage across Bathurst Inlet. We shot a deer and a pair of swans; and between 9 and 10 P.M. encamped at the entrance of Moore Bay, where the snow dissolving on the rocks furnished us with pure water, and the contiguous shores with some drift timber.

New ice of considerable thickness formed during the night, and cost us some trouble to break it next morning. The old ice for its part led us

the complete circuit of Moore Bay. There was a thick fog at the time, which cleared off as the day advanced, and revealed to view shores still rocky, but enlivened by verdant valleys and declivities, which on a near approach seemed carpeted with flowers — ephemeral glories strangely contrasted with the cold and savage scene of their birth! We made our way out of the labyrinth of islands which here environ the coast, through a strait thirty or forty yards wide. A breeze springing up from the north-east, we sailed across Arctic Sound, and at 8 P. M. encamped on Woollaston Point, close to the margin of the ice. Two fine deer were shot by our Indians during the night.

Very early on the 31st I observed, from the summit of the rocks, the gradual formation of a narrow lane of water, stretching across towards Barry Islands. We immediately embarked, and effected the traverse in two hours; but found our farther progress arrested by the main body of ice, which covered the inlet. Next day a gale from the north-east broke up a large section of this unwelcome covering, and brought it down with crushing force upon our island.

On the 2nd of August we extricated ourselves from the ice, and, the northerly winds continuing, we sailed round the south side of the

island, which is about six miles long and two wide. Then, crossing a broad channel leading to the southward, we landed on the next island of the same group, which appeared of great extent. From the top of its lofty trap cliffs I discovered a narrow part with water on the northern side. It proved a high rocky isthmus, a quarter of a mile broad, across which we carried the boats and cargoes. After rowing about half a league, we had to break our way through a stream of ice; and, a few furlongs farther, came again to the edge of the main body of the ice, where we encamped at 9 P. M., having by our toilsome and circuitous route advanced only eight miles of direct distance.

Our detention the following day was amply compensated by my fortunate discovery of several pieces of pure copper ore. They were lying amongst the débris at the foot of a crumbling rock, which had evidently fallen from the trap hills above. The cliffs were everywhere stained with verdigris, indicating the presence of the metal, which undoubtedly abounds in these islands. Coloured quartz crystals and vesicles were frequent, and I preserved specimens of the leading rocks, both here and all along the coast. Barry Islands contain several fine deep harbours, completely land-locked and sheltered from every

wind. Should these seas ever be navigated by ships, this would form a good half-way wintering station between Barrow's and Behring's Straits; and the mines might be wrought from May to August, before the ice would admit of prosecuting the voyage. The tides and currents in the inlet are exceedingly irregular, depending on the winds and ice; but on no occasion did I notice a change of more than one foot in the water level. Deer were numerous, including for the first time does with their fawns, now well grown. Sinclair shot two fat bucks; and, on his return, was followed by a barren-ground bear with her two cubs, attracted by the smell of the meat he was carrying. On his throwing down his burden, they scampered off, before he could get his gun ready. The young ptarmigan were strong on the wing; and herds of seals lay basking on the ice near this island. Stone traps, old paddles, and other vestiges indicated the occasional abode of Esquimaux, who use turf as well as wood for fuel. A small lake not far from our encampment was still frozen.

4th.—The ice continuing immoveable on the northern side of the island, and some open water having been seen from the hills in the channel separating it from the eastern mainland, we

this morning went south about the island, which occupied eight hours' incessant rowing. Then crossing the strait, which is three miles wide, we landed to breakfast at Point Everitt. The ice obstructed our passage round this cape, after which we had a clear channel to Fisher's Islands, where we encamped at 9 P. M., having come thirty-five miles. The last of Barry Islands affords a fine illustration of the secondary resting upon the primitive rocks. The horizontal line of stratification appeared as accurately drawn as in a work of art. At the precipice from whose face I took away specimens, there were about twenty feet of the base rock above the sea, with eighty feet of trap cliff superimposed. Others doubled these dimensions. Point Everitt, and the whole range of the mainland to Melville Sound, are formed of bare rounded granitic hills of inferior altitude, while all the adjacent islands present a mixed geological character.

Our progress on the 5th was not much impeded till we reached Cape Croker, where the ice was squeezed upon the shore, and obliged us to make a portage. We had a view of Melville Sound quite covered with ice, but an almost clear channel luckily stretched across its entrance to a low island, four or five miles distant; the northern side of which being shut up,

we encamped at 8 P. M. A pair of brown cranes stalked about—the undisputed lords of the isle before our arrival. Many large brown ducks flew past, and "cacawees" were moulting along the shore in great numbers. A very strong current, amounting to a rapid, ran between the south end of this island and an islet lying off it; a similar appearance was afterwards noticed near Cape Flinders.

A narrow channel having opened, we re-embarked at 4 o'clock the following morning. After advancing for two or three hours, we were again stopped by the ice, but endeavoured to force our way through it, encouraged by the appearance of some water ahead. Thrice we repeated the attempt, and as often found ourselves hemmed in, and compelled to carry both boats and cargoes to the shore, to save them from being crushed. On the summit of a cliff, one hundred and fifty feet high, I found two pieces of wood, almost rotten. They must have been left there many years ago by the natives, who seem fond of encamping on elevated spots. The ice-covered gulph, with its innumerable dark rugged islands, the clouds gloomily gathering over the crescent-shaped mainland, and long files of waterfowl passing aloft to the southward, warned by instinct of some coming change, while around flew several

large hawks, screaming wildly at the danger that threatened their young brood from the intrusion of man,—these were the objects that met my view from the heights; and the stern prospect was little calculated to cheer our spirits, or to buoy up our hopes. At the same period in 1821, according to Franklin's journal, the ice was either dissolved or entirely dispersed. The weather for the ten preceding days had been very mild, and the temperature singularly equable; the extremes (judging by our feelings) being 40° and 50°. The temperature of the sea, however, continued so low, that new or "bay" ice formed every calm night in the open spots, and cut our boats even more than the old. And I would here remark that the bows of all boats intended for such service should be partially sheathed with copper.

On the 7th the tide and heavy rain opened a channel a gunshot wide, where all our efforts had proved unavailing. We made a farther progress of three hours, when we were again arrested in the usual way. It will be tedious and dispiriting to us, to see day after day and week after week pass in a constant and ineffectual struggle with the same cold obdurate foe.

I saw three or four deer on a narrow point, some distance from our encampment; but, on

my cutting them off from the land, they took to the ice, and soon galloped out of reach. The moon was visible to-night, but it was a passing glimpse, and she soon vanished amidst fog and storm. The following day was marked by nothing but fog and rain, with a gale from the north-west.

On the 9th the ice in Walker and Riley bays at length broke up, and we crossed them under sail, with a fresh breeze from the northward. The water for the first time tasted truly salt. We landed at Cape Flinders to breakfast, where a lump of galena was found among the rocks. A piece of wood was also picked up, fashioned like a small fish; an invention probably used by the Esquimaux to lure trout and other fish to holes cut in the ice, where they stand ready to spear them. Immediately on doubling the cape, the ice once more put a stop to our progress. To reach this point, which in a direct line is hardly forty miles from Cape Barrow, we had performed a circuit of one hundred and forty. We should not, however, have regretted this labour, had it not been attended by so great a sacrifice of time, without any melioration of our prospects. The tents were pitched on a beach of sharp stones, the size of a man's fist, and larger, which our men humorously styled "north-west

feathers." The poor fellows' stock of tobacco was by this time entirely consumed, and it was amusing to witness the shifts and substitutes they employed. Swamp-tea, pepper, salt, cotton rags, and even oakum, were used to replenish their empty pipes. People voluntarily subject themselves to a species of slavery in acquiring such useless and disagreeable habits. Of all the individuals composing the expedition I was the only non-smoker; and, throughout the fur countries generally, the exceptions scarcely amount to one in a hundred. The tediousness of time, and the absence of the amusements and recreations common in other parts of the world, sufficiently account for the universal prevalence of a custom so general, even where no such palliation exists.

From the 9th to the 19th of August—a long and fatal delay—we experienced an almost uninterrupted succession of violent gales from the north and west, beating directly upon the shore, accompanied by severe frost, with frequent falls of rain and snow. We remained miserable prisoners in the same ill-omened spot, scarcely able to collect, from a couple of miles on either side, drift wood enough to cook our two daily meals of pemican. Reindeer had become scarce; but ducks and geese passed in large flights to the

southward. The main body of ice before us, which seemed commensurate with the ocean, remained unmoved, resting upon the very sand; while the enormous mass that the gales had broken up in the gulph, closed in behind us with a crashing noise, often mistaken for thunder. Not an acre of water was visible from the heights in any direction, except the little cove in which we lay. Even that poor corner was frequently frozen over of a morning; and, to all appearance, it would now prove nearly as difficult to retreat as to advance. The ice, different from what we had lately seen, was covered with snow, brilliantly white; and we could have little doubt that it was destined soon to unite with the new formation of the approaching winter. Had these gales occurred during the calms of July, our voyage would, in all probability, have by this time approached a successful termination. Speaking of a calm season, Sir John Ross observes, that it is "the most unfavourable weather for navigating these seas, since it is only through the force of the winds that the ice can be opened and dispersed, as navigators are indebted to the northerly gales of summer for whatever progress they can make." Our short summer was now at an end; we all wore our winter clothing; and the truth of the remark just quoted was evident on com-

paring the inclement and boisterous summer of 1837, and the success that then crowned our efforts in a higher latitude, with our present helpless position. That our exertions had even exceeded those of the previous year, the planks of the boats, torn and jagged by the ice, bore alarming proof. It would be difficult to depict our sorrow and disappointment at being thus arrested at the very threshold of our enterprise. Often did we walk along the coast, and climb the hills; but the prospect was still the same. At 1 in the morning of the 16th I first saw the stars; had the sky been clear, they would have been visible several days earlier.

On the 19th the sun set at 8 hrs. 30 min. mean time. The period appointed for the return of former expeditions was now arrived. Franklin's farthest encampment in 1821 was about three miles to the northward of us; but on the 16th of August, in that year, he found here a perfectly open sea. The extreme length and severity of the last winter must have had some share in producing so great a difference.

I may here mention that what appeared the natural run of the tides rarely exceeded one foot; but that, impelled by the westerly gales, the water rose twenty-one inches, and fell off again as soon as the wind shifted to the north. When-

ever there appeared the least regularity, I inserted the results in the annexed table. The flood came from the westward. We certainly found but one diurnal tide to the eastward of the Coppermine River—similar to what has been observed on the shores of Australia. Boathaven—the appellation conferred on our encampment — is situated in lat. 68° 16′ 25″ N., long. (by capital lunars) 109° 20′ 45″ W.; variation 46° E.

That this voyage might not prove wholly fruitless, I proposed to conduct a party of seven men on foot, for ten days, along the coast to the eastward. Should the winds after my departure unexpectedly blow off the land, Mr. Dease agreed to follow with one boat and the remaining five men, leaving the other boat, with the bulk of the provisions, in security at our present encampment. No better plan could be devised for achieving at least a *portion* of the discoveries which we had fondly hoped to complete, without relinquishing the chance of pushing them as far as Ross's Pillar, if the winds happily changed, and drove the ice off the shore. My proposition was, therefore, joyfully received by all, and the crews again volunteered with one accord to accompany me. I chose those who had not been with me at Point Barrow in 1837; and the necessary preparations were made for setting out

next day — the 20th of August. Signals were likewise arranged to prevent our missing each other on the way; and, should we unfortunately do so, the last day of August was fixed for the rendezvous of both detachments at Boathaven.

CHAPTER XII.

Journey on foot and important discoveries to the Eastward.— Return to the Coppermine, and skilful ascent of that river. — Traverse of the Barren Grounds, and arrival at Fort Confidence.

On Monday the 20th of August, at 8 A. M., we set out on our journey of discovery. My companions were five of the Company's servants and the two Indians. Each man's load at starting weighed about half a hundred-weight, comprehending a tent for the nightly shelter of the whole party, a canvass canoe, with frame and cords, to ferry us across rivers, a box of astronomical instruments, a copper kettle, two axes, guns, ammunition, and provisions for ten days; in short, our food, lodging, bedding, arms, and equipage. As for myself, my trusty double-barrel slung at my back, a telescope, compass, and dagger formed my only encumbrance; so that I might at pleasure ascend the rising grounds, to take bearings and view the coast. The plan of

march I adopted was as follows:—We set out at 7 or 8 A.M., after breakfasting (which lessened the loads), and obtaining observations for longitude; and travelled for ten hours, exclusive of a halt of half an hour at noon to procure the latitude and variation. With their burdens the men advanced fully two miles an hour; our daily progress thus averaging twenty geographical, or twenty-three English miles. A fatigue party of three men attended us to our first encampment. About the middle of this day's journey we passed the extreme point to which Sir John Franklin and his officers walked in 1821. A little farther we found several old Esquimaux camping-places, and human skulls and bones were seen in various situations. One skeleton lay alongside that of a musk-bull, in such a manner as rendered it extremely probable that the dying beast had gored the hapless hunter. The coast-line continued low; our road alternately leading over sand, sharp stones, through swamps and rivulets. Large boulder rocks rose here and there upon the shore and acclivities. The ice all along was forcibly crushed upon the beach, the edging of water being so shallow that the gulls waded betwixt the ice and the sand. During the greater part of the day we were drenched with rain. The land preserved its north-north-east direction

to our encampment—on the pitch of a flat cape—in lat. 68° 37′ N., long. 108° 58′ W. This spot I named Cape Franklin, as a tribute of respect, from a perfect stranger, to that enterprising and justly celebrated officer. Land, twenty or twenty-five miles off, high, and covered with snow, stretched from west to north-east, and raised apprehensions that we were entering a deep inlet or sound.

We had no sooner turned Cape Franklin on the 21st than we came in view of a very distant hill, bearing N. 82° E., which I rightly conjectured to stand not far back from the coast. The latter is remarkably straight; but the walking was very fatiguing, the shore consisting chiefly of soft, wet sands, traversed by a multitude of brooks. These descend from a range of low, stony hills, which, at the distance of two or three miles, close the inland view, and were partially clothed with moss and scanty herbage. The ice was everywhere grounded on the shore; but the weather had by this time improved, and continued so clear and moderate during the rest of the outward journey, that I daily obtained astronomical observations. A flight of white geese passed us, led on, or officered, by three large grey ones (*anser Canadensis*). Numerous flocks of these fowl were luxuriating in the fine feeding

that the marshes and little bays afforded. The young geese were large and strong; but, having not yet acquired the perfect command of their wings, we captured several upon the ice. Two white wolves were skulking on the hill-side, and a brace of Alpine hares were shot. Just before encamping, we forded Hargrave River—so named by me after a particular friend: it is about a hundred yards wide. Our tent in the evening wore the semblance of a tailor's and cobbler's shop, every one being engaged in repairing the injuries his habiliments had received during the day. At this place we secured, under a heap of stones, two days' provisions, to serve for our return to the boats.

The shore next day maintained nearly the same character, and was intersected by many small streams; none of which, on our choosing proper crossing-places, reached more than waist-high. They flow over a bed of stones or sand: their waters were at this time low and clear; but their deep and rugged channels shewed that, at the melting of the snows, not a few of them become formidable torrents. The ice grew heavier as we advanced, and had been driven ashore with such violence by the gales as to plough up the shingle and raise it in heaps upon the beach. The stranded fragments were from three

to six feet thick, but no icebergs were anywhere to be seen. I hoped, from this strong evidence of winds and tides, that we were not engaged in exploring a bay; though the northern land still stretched out before us, appearing in some places scarcely twenty miles distant. We found to-day the bones of a large whale and the skull of a Polar bear, and sea-wrack and shells strewed the beach. No deer were seen, but the recent print of their hoofs often appeared in the sand. In the afternoon we passed, at a distance of six miles, the conspicuous hill mentioned yesterday. It is about six hundred feet high, and received the name of Mount George, after my respected relative, Governor Simpson. Drift wood was become so scarce that we made a practice of picking up every piece we could find, an hour or two before camping-time, to prepare our supper and breakfast. Some of the men's legs were much swelled and inflamed this evening from the fatigue of their burdens, the inequalities of the ground, and the constant immersion in icy-cold water. The tide fell sixteen or eighteen inches during our stay at Point Ballenden; but, as it had been subsiding for some time previously, I think the whole rise and fall must exceed two feet. Strong new ice formed in every open spot during the calm of the night.

On the 23rd the coast led somewhat more to the northward. The travelling was exceedingly painful; the beach and slopes of the hills being formed of loose stones, varied here and there by moss, and an ample number of brooks and streams. We, however, advanced with spirit, all hands being in eager expectation respecting the great northern land, which seemed interminable. Along its distant shore the beams of the declining sun were reflected from a broad channel of open water; while, on the coast we were tracing, the ice still lay immoveable, and extended many miles to seaward. As we drew near in the evening an elevated cape, land appeared all round, and our worst fears seemed confirmed. With bitter disappointment I ascended the height, from whence a vast and splendid prospect burst suddenly upon me. The sea, as if transformed by enchantment, rolled its free waves at my feet, and beyond the reach of vision to the eastward. Islands of various shape and size overspread its surface; and the northern land terminated to the eye in a bold and lofty cape, bearing east-north-east, thirty or forty miles distant, while the continental coast trended away south-east. I stood, in fact, on a remarkable headland, at the eastern outlet of an ice-obstructed strait. On the extensive land to the

northward I bestowed the name of our most gracious sovereign Queen Victoria. Its eastern visible extremity I called Cape Pelly, in compliment to the Governor of the Hudson's Bay Company; and the promontory where we encamped Cape Alexander, after an only brother, who would give his right-hand to be the sharer of my journeys.

Cape Alexander is a rounded, rocky ridge, covered with loose stones,* four miles in width, and two or three hundred feet high. Its western part is situated in lat. 68° 56′ N., long. 106° 40′ W. The rise and fall of the tide here was little short of three feet, being the greatest yet observed by us in the Arctic seas. The weather was calm, and the tide falling, when we halted. A considerable quantity of loose ice passed to the westward, and floated back again as the water rose in the morning, affording a seeming presumption that the flood came from that quarter. A solitary deer bounded up the ascent, and along the shore ran a path beaten by those animals. Sinclair wounded one of a small herd of musk-cattle that were grazing on the banks of a lake behind the cape,

* The prevailing surface rock was a conglomerate, while the sides of the ravines hollowed out by brooks were of red sandstone.

but it escaped. Esquimaux marks stood upon the heights, but no recent traces of inhabitants could be found.

We next morning cut across the eastern shoulder of Cape Alexander, to Musk-ox Lake, which lies in a valley. It is half a mile long, and empties itself by a subterraneous channel, through a steep ridge of shingle, into another basin, about half its size, which was frozen to the bottom. Crossing the ice, we forded the little stream below, which, like many others, still retained drifts of snow on its banks. Our rough route led amongst large boulders, and through wet mossy tracts producing dwarf willows. The immediate coast-line continued flat, but skirted as before by low stony hills. Some ice lingered in the bays, but the sea was quite open. At the distance of nine miles we crossed another bluff cape, composed of trap rocks, where an observation gave the latitude 68° 52′ 19″ N., variation 63° East. This was the greatest deviation of the compass from the true meridian. From Boathaven to Cape Franklin the variation increased very fast, since only nine miles beyond that cape it was found to be 60°. Thence advancing eastward, it fell off to 56° 30′, and again augmented as the coast trended more northerly; while from Trap Cape to our

extreme point—only eleven miles in a south-easterly direction—it diminished nearly one and a half degrees. Where the direction of our journey crossed that of Ross's magnetic pole at large angles, the change of variation was rapid; when we travelled nearly in the line of that pole, the change was slow. The farther east we went, the more sluggish did the compass become; the pocket one especially often had to be shaken before it would traverse at all, and, when set upon the *rocks*, would sometimes remain pointing just as it was placed.

At 6 P. M. we opened what appeared a very extensive bay, running far away southward, and studded with islands. We proceeded on to a projecting point, where we encamped. From thence I could trace part of the western shores of the bay, formed by a bold curve of granitic hills; other land blending with the horizon in the E.S.E., apparently very remote. As the time allotted for outgoing was now expired, this great bay, which would have consumed many days to walk round, seemed an appropriate limit to our journey. Under any circumstances, the continued and increasing lameness of two or three of my men must have rendered my return hence imperative. I had, indeed, at one time hoped to fall in with Esquimaux, and with

their assistance to reach Ross's Pillar; but we had already explored a hundred miles of coast without encountering an inhabitant. The site of three lodges, with a little fire-place of stones apart, was found here, but they were not of this year. Cold and famine, I fear, are gradually wasting away that few in numbers and widely-scattered people. A rapid stream discharged its waters into the bay, two miles to the southward of our encampment, and was called the "Beaufort," after the learned hydrographer to the Admiralty; while the group of islands beyond received the name of the first Lord of the Admiralty, the Earl of Minto.

The morning of the 25th was devoted to the determination of our position, and the erection of a pillar of stones on the most elevated part of the point; then, hoisting our union-jack, I took formal possession of the country in her Majesty's name. In the pillar I deposited a brief sketch of our proceedings. It is in lat. 68° 43′ 39″ N., long. (reduced by the watch from Boathaven) 106° 3′ 0″ W.; and the variation was 60° 38′ 23″ East.

Our present discoveries were in themselves not unimportant; but their value was much enhanced by the disclosure of an open sea to the eastward, and the suggestion of a new route — along the

southern coast of Victoria Land—by which that open sea might be attained, while the shores of the continent were yet environed by an impenetrable barrier of ice, as they were this season. Our portable canoe, which we had not had occasion to use, was buried in the sand at the foot of a huge round rock on the beach, and with lighter burdens we commenced retracing our steps. As we approached our encampment for the night, we had a capital deer-hunt, which ended in our dispatching a young buck in a small lake; and it was carnival time with us, for one evening at least. This was the last fine day that we enjoyed. During the remaining four occupied by our return to the boats, we had to face piercing north and westerly winds, with fog, snow, and rain, aggravated by hard frosts at night. Our march, through swamps, sand, stones, and streams, grew more and more laborious; and, being continually wet, we suffered much from the cold, for the shore did not yield sufficient fuel to dry our clothes at night. Sandpipers and other little birds lay dead in several places upon the beach, having apparently perished by the severity of the weather. We saw some herds of deer migrating southward: one magnificent buck marched before us, like a doomed victim, for two days, and was shot near our last encampment.

Geese were still numerous, but quite unapproachable. We could not help enjoying the speed with which they sailed past us, high amidst the storm, in quest of more genial climates. So barren and desolate is this coast, that, during the whole journey, we did not find a single berry. The lameness of two of my men increased so much, that, after sitting down to rest themselves, they had to lay hold of each other in order to get upon their legs again. They suffered acute pain; and one of them—a sturdy Greenland sailor—was laid up for some time after our return to winter-quarters. With respect to the ice, it seemed to have made a grand move during our absence. We first encountered it, on our return, at Trap Cape, rapidly driving to the eastward. It continued to obstruct the shore all along from Cape Alexander to Cape Franklin, but there was now a clear offing that a fleet might navigate. I cast many a wistful look towards the open water, hoping to descry the sails of Mr. Dease's boat; and from time to time fired, to apprize him of our being near, in case of his keeping too far out to be distinguished through the fog: but all in vain. As the land inclined to the southward, the quantity of ice increased so much as to render the coast inaccessible; for the tendency of the westerly gales was to accumulate it on this shore.

At dusk on the 29th we returned to Boat-haven, where we found our friends just as we had left them. I then learned from Mr. Dease that he could not have extricated his boat sooner than the preceding day, and did not think it worth while to risk the attempt so late.

The bad weather and advanced season now rendered every one anxious to return to winter-quarters, and I reluctantly acquiesced in the general sentiment; but, for doing so, I had reasons peculiar to myself. I considered that we could not now expect to reach Back's Great Fish River; that, by exploring *a part* only of the unknown coast intervening, our return to the Coppermine must be so long protracted as to preclude the possibility of taking the boats up that bad river; and that, by abandoning them on the coast to the Esquimaux, we excluded the prospect of accomplishing *the whole* by a third voyage, with the benefit, perhaps, of a more propitious season. Three great travellers, Hearne, Franklin, and Richardson, had successively pronounced the ascent of the Coppermine, above the Bloody Fall, to be impracticable with boats; and our people, recollecting only the violence and impetuosity of our descent, entertained the same opinion. Fully aware of the great importance of this point to any future operations, I had, with a careful eye,

inspected every part of the river, and formed in my own mind the following conclusions respecting the upward navigation:—1st. That in a river of that size there must always be a *lead* somewhere, of depth enough for *light* boats. 2nd. That the force of the rapids would be found much abated; and that, with strong ropes, the worst of them might be surmounted. 3rd. From the fury of the breakers along the base of the precipices in June, I inferred the existence, at no great depth, of a narrow projecting ledge of rock, that, bared by the falling of the waters, would afford footing to the towing party; without which the ascent must, indeed, have baffled all our efforts. These views proved in the sequel to be just and well-founded.

A furious gale from the westward, accompanied with snow, detained us till 10 in the forenoon of the 31st, when we cut our way out of our icy prison—the grave of one year's hopes. We experienced a dangerous swell among the streams of ice outside; then, steering a west-south-west course, a traverse of nine miles brought us to Harry Cook Island, so named on the former expedition. On a close approach, however, it turned out to be a cluster of six or eight rocky isles. From thence we crossed to Wilmot Islands, a very numerous group, merely seen

at a distance by Sir John Franklin. Some of the northern passages were blocked up with ice, but everywhere else there was a clear sea among these islands. They are all of the trap formation, like those farther down the gulph.* Another traverse of ten miles extends to some islands on the eastern side, within fifteen miles of Cape Barrow. From thence we were favoured with a fine passage on an open sea; but there was a frequent fall of snow, the weather was cold and wintry, and we had some rough sailing during the dark nights. At a rocky cape, where we landed to sup at midnight, I noticed a quantity of phosphorescent substances in the water. We met no natives; and at 6 P.M. on the 3rd of September we safely re-entered the Coppermine River.

The Esquimaux had ventured back during our absence, and carried away everything except their sledge and stone kettles; leaving marks on the hillock, pointing to the seaward islands as the place of their retreat. To evince our friendly disposition, and compensate the loss of their dogs, we left them a copper kettle, two axes, as many ice-trenches, with an assortment of knives, files,

* Being unable to weather the outermost island, which is large and lofty, we ran round its south end, and called it Chapman Island, after one of the Company's Directors.

hooks, awls, beads, buttons, rings, and a parcel of hoop-iron. This—to them invaluable—gift was secured in a box, on which boats and men were figured with charcoal. Next day the boats were towed up to the Bloody Fall, now diminished to a strong shelving rapid. There, in a deep cleft in the rocks, we secured ten bags of pemican, to meet the exigencies of another season. The masts, yards, rudders, and spare oars were secreted on an island below the fall. No late vestiges of the natives were anywhere discernible, though an eddy at the foot of the fall still swarmed with fish. The few blue berries that grow among the rocks were withered and fallen.

On the morning of the 5th the boats were, by M'Kay's and Sinclair's united skill, successively passed up the fall perfectly light, both crews hauling on ropes formed of the rigging spliced together for the purpose. In the lower part, where the descent was too steep, they made a launch over the rocks. In another place, the boat sheering out, the waves broke copiously into her; and the bowman was on the point of cutting the line, to save the trackers, who, ignorant of their danger, because concealed from view by a projecting point of rocks, would have been jerked into the abyss the instant the boat overset. Her depth of keel, however, prevented a catastrophe

which must have happened to any of the flat-bottomed inland bateaux in the same situation. It snowed heavily, and ice an inch thick formed at night in the kettles; but our people worked their way up the rapids with equal spirit and dexterity, and we encamped two miles below the Escape.

In the passage of that dangerous rapid, the following day, Mr. Dease's boat got broken, in consequence of the line snapping, and the bowman losing his presence of mind. The injury was repaired in a few hours, and we made good ten miles. The lurking rock, which had so nearly caused our destruction on the descent, now rose high above the shrunken stream, leaving the narrow, perilous channel that saved us almost dry. At the foot of the long succession of precipices which we shot past with such amazing velocity in June, there was now, in most parts, a narrow bank or ledge exposed by the subsiding of the waters. Where this was not the case, all hands embarked; and, if no bottom could be found with the setting-poles, the boats were drawn up by means of the ice-hooks, fixed in crevices and on sharp points of the rock. In this difficult operation it was necessary actually to graze the cliffs, some fending off the boat's side; otherwise the force of the current must have overpowered our hold, and

carried us down backwards. In some of the worst places short portages were made; in others, the boats took in much water; and the strain on the lines was often so great, that the trackers, even on all fours, could scarcely maintain their ground. Where bars and shallows occurred, the boats were poled up in ziz-zag fashion; or the men, getting out in the water, handed them over the obstruction. Numerous fragments of rock kept falling from the face of the cliffs as the towing parties passed under them, and one man narrowly escaped getting his leg fractured; their feet were at the same time much galled by the sharp stones which strewed their difficult path. The preceding description is equally applicable to our journey of the 7th, when we surmounted the strong rapid where we were detained on the 23rd and 24th of June. Nothing but the skill and dexterity of guides long practised, like ours, in all the intricacies of river navigation could have overcome so many obstacles: it is not, therefore, surprising that Dr. Richardson's less experienced crews should have found it necessary to relinquish the attempt, even with the "walnut shell." We felt a positive comfort in encamping once more among standing trees, though ever so diminutive.

We were now above all the bad rapids; the

banks became less steep, the current regular, but swift and strong. The water had a fine sea-green colour: it was deep, and so clear, that fish were often seen by the bowmen darting along the stony bottom. The weather grew mild under the influence of southerly breezes, to which we had long been strangers; and, in the height of the day, the sandflies even became troublesome on the immediate borders of the river. Mr. Dease and myself walked across the country, enjoyed some picturesque views of the Copper Mountains, and had excellent sport among the deer, which were tolerably numerous and in high condition.

The towing party picked up several small pieces of copper and galena washed down by the river, and passed the carcases of a number of deer that had been drowned in the rapids. At 1 in the afternoon of the 9th we reached a well-wooded spot, five or six miles below the junction of Kendall River. This being the nearest point of the Coppermine to Fort Confidence, and at the same time an eligible place for repairing the boats in the ensuing spring, we determined to deposit them here. They were accordingly hauled up into the wood, beyond the reach of the spring inundation. Three bags of pemican, two of flour, and everything else not absolutely

required for the land journey, were secured from beasts of prey in a cache of ponderous stones; all that we carried with us scarcely amounting to thirty pounds each man.

On the 10th, striking straight out through thin dead woods, and barrens abounding in small lakes, we fell upon Kendall River at the end of ten miles, about half a league below our spring provision station. It was only knee-deep there, full of large stones, and, like Dease River on the opposite side of the height of land, must be quite unnavigable, except in the month of June. I may take this opportunity of observing, that the actual descent of the former stream, though its course be shorter, appeared to us little inferior to that of the latter. The Coppermine, therefore, in its course of seventy miles from Kendall River to the sea, makes a descent equal to that of the whole of Bear Lake River, itself a rapid stream, together with that of the Mackenzie, below their confluence,—a united distance of between five and six hundred miles. In the evening, as we crossed a desolate valley full of lakes, a cloud of snow geese suddenly poured over the brow of a neighbouring hill, and alighted about the lakes. Deer were scarce; but, having wounded a small one, we were surprised to see the biggest of our Esquimaux dogs,

though like the rest of the party they carried bundles on their backs, rush forward and throttle the poor animal as it strove to escape.* The night was very cold, and our bivouac was on the side of a barren mountain.

Next day we traversed a range of wild rugged hills of naked rock, to the south branch of Kendall River: then, ascending the valley, we discovered in the evening smoke issuing out of the solitary cluster of pines where I slept on the 4th of April. We marched along the hill-sides, and, when within hearing, discharged our guns; upon which several fires were simultaneously kindled. Descending from the heights, we crossed the streamlet, and found a numerous camp of Hare Indian women and children; the men being out a-hunting, or gone to Fort Confidence with meat. These kind people were delighted to see us, and offered us food. The greeting which our two hunters—their relatives—received was boisterously affectionate. The old women closed around them, hugged them over and over again, and, in the transports of their joy, even

* These dogs, contrary to our expectation, proved very inferior in the sledge to our own European breed; their size being considerably smaller, after due allowance for their bushy coats and the shortness of their leg unfitting them for making their way through deep snow.

went the length of abstracting knives and sundry other small articles from their persons—doubtless as memorials of their safe and happy return. The poor fellows themselves seemed rather ashamed of this hubbub in the presence of whites, and looked as if they would gladly have dispensed with the *disinterested* attentions of the elderly ladies.

We travelled all the succeeding day over bare mountains covered with loose stones; the weather snowy, and bitterly cold. In the evening we descended to the borders of some lakes, where the natives had constructed a deer hedge set with nooses.

On the 13th, seeing large smokes on the north side of Dease River, we made towards them, though a good way out of our course. Falling upon a deep part of the stream, some crossed it on a raft, others found a ford. We lighted fires in conspicuous places, which were answered; and at length we were overtaken by two Indians, who, with as many others, carrying a bag of pemican, had been considerately despatched by Ritch to meet us. Fortunately we did not stand in need of their assistance; and, proceeding on, we encamped at Chollah Lake, which is three miles long, and contains some pretty islands.

On the 14th we traversed a woody tract to

the north of Dease River; and came in view of Great Bear Lake at noon, from Cranberry Hill, six miles distant from the establishment. Throwing ourselves down, we regaled freely on the acid fruit, which grew profusely among the rocks; then, setting out at a quick pace, in two hours more we arrived at Fort Confidence.

CHAPTER XIII.

Transactions at Fort Confidence, Winter 1838-39.—Murder and Distress among the Indians.—Relief afforded them.

We had the satisfaction to find the people in perfect health, and everything in good order, on our arrival. The buildings had been rendered more comfortable during the summer; and Ritch had not only purchased a considerable quantity of dried venison from the Indians, but had also prepared in the same manner several thousand trout and white-fish, taken by his fishermen on either side of the island. A serious misunderstanding with the natives had, however, nearly arisen from a very trivial cause. A person at the house caught a little water-insect, bearing, like the root of the mandrake, some faint resemblance to the human form, and afterwards threw it back into the lake. Out of this incident a story was manufactured and circulated, that the whites had caught and murdered an *Indian*, and cast hisbody into the water; nor were the natives

convinced of their foolish credulity till after our return. Supposing, from the stock of provisions on hand, that we might safely dispense with the further services of our Chipewyan hunters, we sent them back to their own country by a boat which came with our supplies from Mackenzie River. After being liberally recompensed for all the meat they had furnished us, and amply provided for their journey, they received a present of two hundred beaver-skins payable on their arrival at Athabasca. As it was their intention to hunt a rich fur country on their way from Fort Simpson thither, if they have learned foresight and economy from the whites who brought them so far from their own lands, they may, with such means untouched before them, be among the most independent of savages. Four men of our own, and some dogs, were despatched by the same conveyance to Mackenzie River and Great Slave Lake, to meet the expected expresses, and bring back some articles of clothing, &c. required by our people, which had been kindly forwarded from Norway House by Chief Trader Ross.

On the 18th of September an annular eclipse of the sun took place. Its beginning was invisible, from clouds; and the Indians at the house looked on with surprise when they saw me place

myself at the telescope. But, before noon, the heavens cleared, the sun shone out, shorn of half his beams, and the natives were struck with amazement when I pointed out to them the moon-like form of the more glorious luminary. Then their chief conjuror, Zāedhi, confessed that he was but a child in knowledge. This reminds me of a singular coincidence in a prediction of that same personage, at Fort Confidence, regarding us, during our absence on the coast. After working himself up to the prophetic pitch with the aid of his drum and other mysteries, he suddenly exclaimed, in presence of the inmates, "I am afraid, I am afraid—I see Esquimaux dogs in their camp," &c. He afterwards assured his wondering auditory that he had been with us "in the spirit," and exhibited some balls belonging to my percussion gun, the first of that sort he had ever seen, which he pretended to have taken out of my pocket while asleep, though he had in reality abstracted them from my apartment, probably for this express purpose. The more horrible parts of his prediction were disproved by our safe return; but his single hit, regarding the *dogs*, was amply sufficient to secure him an enduring reputation among his credulous countrymen. The professions of conjuror and physician are among all savage nations united,

or rather synonymous, for ignorance is the parent of superstition. As the young men who assisted us to Kendall River, and who carried my little wolves to the establishment, were on their way thither, they stopped at the hunting-camp, where they found the blind old man, already spoken of, at the point of death. The singular thought instantly occurred to the conjuring doctor that the skin of one of the poor little animals, taken off and applied, yet warm with the vital heat, to the breast of the expiring man, would reanimate him and restore his vigour. The experiment was tried, but I need not add in vain.

This aged man's was the only natural death that occurred within our knowledge during the summer, for the natives enjoyed abundance, and were happily free from all sickness; but, on the 20th of October, we received the distressing news of the murder of two young Dog-rib girls in the direction of the Coppermine, a few days after our return from that river. They had gone out to a little distance from the camp, in order to carry home venison, when they were assailed by some dastardly lurking wretch, who despatched the poor defenceless creatures with a knife. Many and various were the opinions respecting the perpetrators of this detestable crime; even the Esquimaux were accused; but

for some time suspicion rested upon the Copper Indians. The Dog-ribs and Hare Indians long groaned under cruel injuries from the latter licentious tribe, who termed them "slaves," and, whenever they met, used to rob them of their women and their most valuable effects. But the "slaves," though to a stranger they appear a mild race, are yet exceedingly treacherous; a quality which their cowardice serves but to augment, for what they dare not attempt openly they effect through stratagem and cunning. Thus, in 1823, they fell upon their persecutors by surprise, and cut off a considerable party, including The Hook and Long Legs, who figure in Sir John Franklin's first journey. The terror of this act of retribution is undoubtedly the cause why we were visited by no Copper Indians during our long residence at Fort Confidence. The present suspicion arose from the recent death of Akaitcho, the old chief of that tribe, so honourably mentioned by Franklin and Back, and a reported declaration of his followers, that their grief and despair could only be consoled by making war upon their unoffending neighbours. At length, however, the suspicion attached to the Copper Indians was discarded, and the guilt fixed by the natives upon an individual of their own camp, named Edahadelly (my quondam hunting

companion), who had all but avowed the commission of a former act of blood. I shall give the reasons which led to this conclusion, as they furnish a favourable specimen of Indian logic; though it is but fair to add that they were the fruit of the united wisdom of the whole camp, extracted by slow degrees, and matured in many long and smoky conferences. Edahadelly, on his return to the camp on the day of the murder, reported that he had seen at a distance two suspicious-looking strangers, who were never heard of afterwards, nor were even their tracks seen by the other hunters, who were out in various directions the same day. On one of the bodies being brought in by those who went to look for the missing girls, he set about conjuring, which he pretended revealed to him the place where the other corpse lay, and its position; also that, after being mortally wounded, the poor little girl had applied a piece of leather to her side to stop the effusion of blood. All these particulars were verified; Edahadelly himself leading the way to the fatal spot, and afterwards taking upon him the duty of interring the body, in order, the Indians said, to entitle him, without confessing the deed, to assume certain marks upon the wrists and neck—the same which, by their superstition, a murderer wears.

Whoever was the real assassin, the alarm occasioned by this atrocious action had well-nigh brought upon our Indians, and upon ourselves, still greater calamities. The natives abandoned their hunting grounds, and flocked for protection to the establishment, where it was afterwards asserted by the female inmates that a plot was actually hatching against us by the relatives of the deceased, the very people who shared most liberally in our bounty; "because," said they, "if the fort had not been on our lands, we should not have been where we were when the misfortune happened!" Be this as it may, many of the Indians must have perished from hunger, had it not been for the prompt and extensive relief we afforded them, not merely while they remained with us, but comprehending provisions to take them to places where they might procure their own subsistence. This was done at our own imminent risk; for, though fall-fisheries were established immediately after our return from the coast, they were unproductive, and the winter fisheries yielded still less than those of the previous season. During the remainder of the year 1838 the natives were a grievous burthen upon us, and rendered us little or no assistance; for the deer had deserted the peninsula, where they were so numerous the former winter, and retired

to the southward of Great Bear Lake, and along the woody borders of the Coppermine River. Most fortunately for all, the present winter was less inclement than the long and terrible one of 1837-8.

Finding our resources falling very low, Sinclair was placed, with our two active coast-hunters, Larocque and Maccaconce, who with their brothers formed a little party, at the head of M'Tavish Bay. Animals being very scarce, the supply of meat we received from them in the beginning of 1839 was extremely small: matters, however, might have improved, had not a most exaggerated rumour of their success reached the ears of a number of elderly people and children who were scattered at the various fishing points in our vicinity. Some of these came to the house and received a supply of provisions from Mr. Dease, under promise of returning to their fishing-places, and remaining quiet till we heard *certain* news from the hunters; instead of which they all collected, and with the very means furnished them clandestinely set out to join those poor fellows, though not less than sixty miles off. This they regarded as a master-stroke of cunning, but it had well-nigh cost them dear; for in February Sinclair returned in a very reduced state, having, in common with the whole

camp, been for some time subsisting on scraps of skin and roasted leather. The able hunters, he informed us, had been obliged to separate from the old people who brought this misery upon them, and proceed south-eastward to the Coppermine River; while the unfortunate dupes of their own folly, about twenty in number, were left in a pitiable condition at the head of M'Tavish Bay. We lost no time in sending them a large bag of pounded meat, reserved for making pemican in the spring, which saved them from absolute starvation; and, with Sinclair's assistance, they rejoined our hunters near the Coppermine, whose services were consequently lost to us for the remainder of the season. Independent of frequent passing relief, we had, in the same month, the satisfaction of saving the lives of two old women and two little girls at the establishment. The latter especially, when brought in, were so weak as to be scarcely able to stand; but by care and kindness they recruited fast, and all remained with us till late in the spring. In short, the winter was one continued term of anxiety on our part for the natives around us; while our stock of food at the fort was, by the opening of March, almost entirely expended, our men having to perform journeys of two and three weeks' duration to the southward, where alone

reindeer were to be found. The only persons who actually perished during this miserable winter were an elderly woman and a new-born child, which the starving mother cast away. Far be it from us, however, to arrogate any merit for our exertions in preserving the lives of our fellow-creatures. It is a duty conscientiously fulfilled by every officer in the service when the occasion arrives, and was this very winter performed with equal effect by our next neighbour, Chief Trader M'Pherson of Mackenzie River.

The cause which leads to the occasional abandonment of the old and decrepit in the northern districts has never been thoroughly explained.* When a party determine upon proceeding to some distant hunting-ground, they usually leave the refuse of the camp at some known fishery, where they can easily subsist during the absence of the active and the robust. The old folks, however, who are in general noted as grumblers and haters of fish diet, are not always satisfied with this arrangement; and, in spite of remon-

* The Sioux, Assiniboines, and the tribes on the Missouri, according to Lewis and Clarke (vol. ii. p. 421), habitually abandoned their people when no longer able to follow the hunting-camps; telling them that they had lived long enough, and that it was now time for them to go home to their relations.

strance, will hobble after the hunting-camp, often reaching it long past nightfall. They act as a dead weight upon the able hunters, who are by Indian law — a law founded on the two great principles of reciprocity and necessity — obliged to share their success with all present; and, when the scarcity occasioned by their own obstinacy ensues, these elderly people are, of course, the first to sink under it. In this very way were the twenty, whom Sinclair rescued from inevitable death, exposed to the last extremities, as already described. No people so soon get tired of any particular diet as Indians; and their longings for change, even amidst the best cheer, are often truly ridiculous. The flexibility of their stomachs is no less surprising. At one time they will gorge themselves with food, and are then prepared to go without any for several days, if necessary. Enter their tents; sit there, if you can, for a whole day, and not for an instant will you find the fire unoccupied by persons of all ages cooking. When not hunting or travelling, they are, in fact, always eating. Now, it is a little roast, a partridge or rabbit perhaps; now, a tid-bit broiled under the ashes; anon, a portly kettle, well filled with venison, swings over the fire; then comes a choice dish of curdled blood, followed by the sinews and marrow-bones of deer's legs singed on the

embers. And so the grand business of life goes unceasingly round, interrupted only by sleep! Another physical singularity of the northern tribes is, that though capable of resisting, with great fortitude, the most intense cold, they are wonderfully fond of fire. At an establishment, even when the weather is mild and pleasant out of doors, they are to be seen heaping on fuel in the house, and actually sitting cross-legged on the hearth, where a white man would speedily be roasted. I have, however, remarked, that the invariable effect of the North American climate is to render even Europeans more chilly than on their first arrival; from which we must infer that there is something debilitating in the climate or mode of life.

During ten days in March I was absent on an excursion, with two servants and two natives, for the carcases of a couple of deer placed "en cache" by the latter to the southward of Great Bear Lake. When we reached the place, we found that the deposit had been wantonly opened for the purpose of purloining part of the meat, which was already paid for. The consequence was, that the ravenous wolverenes had obtained free ingress, and left us little more than the bones. The camp having removed still farther southward, I dismissed the Indians, and with my

two companions returned, on short commons, to the establishment. I regretted this disappointment the more, as it prevented me from exploring the remaining ramifications of the south-east corner or angle of M'Tavish Bay, which terminates this magnificent inland sea. These slender but numerous arms are concealed by the large island where Dr. Richardson and Lieut. Kendall's survey in 1826, and mine in 1838, met. Some of them I passed through on the way to our rifled cache; but our couriers to and from Port Simpson, by way of Marten Lake, travelled a good day's journey farther southward, among numberless channels and islands, which I soon found it would be an endless business to examine. At a very short distance the shore appears uniform, though rugged; but, on approaching closer, and turning a rocky point or looking in behind an islet, a cove or creek is seen, ending apparently within gunshot, when, on advancing to make "assurance doubly sure," the wanderer is astonished to find a narrow winding channel, which, after a mile or two, expands into a wide arm, running away to an unknown distance among the hills and precipices of naked rock that form this truly primitive country. Crossing one of these branches on the way out, I asked my native guide how far it led. He, apprehending my desire of

exploring it, replied, "Ten days' journey," pointing to the north-east, "without a tree to make fire." On my telling him that such a distance was impossible, from the situation of the Coppermine River, and requesting him to make a chart of the inlet on the snow, as our slender supply of provisions did not admit of penetrating farther into it, he drew the figure copied in the map (which I have reduced to the modest estimate of twenty miles), with this essential difference from his prior statement, that I could encamp half-way the *first* night — at a mountain of the shape of the white men's houses, containing a cave wherein the Indians practise their most solemn necromancy. The country south-eastward of M'Tavish Bay is very hilly, with granite rocks protruding through the snow, but becomes better wooded the farther we recede from Great Bear Lake. Birch here begins to mingle with the pines; and at Leg Lake, where we slept, I found the wood close enough to afford some shelter against the piercing winds, for the first time during all my winter journeys from Fort Confidence. Widely different, indeed, are the hardships of such travelling in the barren lands, from those endured in the well-wooded countries of Athabasca and Mackenzie River. During the day our road lies over bare mountains, or on the no less unsheltered and stormy lake—one

traverse of which, thirty miles wide, I now crossed for the third time. The snow too is very rough and granulated, yielding, indeed, superior water to the soft snow of the woody districts, but tearing the sledges, and lacerating the feet both of men and dogs; while the cold endured on the journey, especially during the night in the open, exposed encampment, is excessive, and trying to the stoutest constitution.*

On my return to the establishment, I found that it had been visited by a party of eleven Hare Indians from a remote camp to the westward, who brought a most acceptable supply of half-dried ribs of venison. They reported the snow to be very deep, and reindeer unusually numerous in their quarter; which we were afterwards glad to find confirmed by letters from Mr. Bell, at Fort Good Hope. About this time also Le Babillard and a small hunting-party, three or four days' journey to the eastward, fell in most opportunely with a drove of musk-cattle, in whose

* Cold and comfortless as these bivouacs are, the spirit of hilarity generally prevails, when the fire has once been lighted, and the kettle begins to boil. I remember our little party being once convulsed by seeing an old dog snatch out of the fire, instead of a bone which some one had thrown there, the unkindled end of a burning brand, and deliberately walk away with it in his mouth. Even such trifles will amuse after a long and wearisome day!

spoils we participated. While thus living from hand to mouth, we experienced the utmost inquietude on account of M'Kay, Sinclair, and a young half-breed, who were absent with the party already mentioned, near the Coppermine River, for six-and-thirty days, without our receiving the least tidings of them. At last they made their appearance on the 15th of April, having till then barely subsisted among the large party, whose main support were our own two paid coast-hunters, without being able to collect any provisions for the establishment. Had it not been for another visit from the distant Hare Indians, accompanied this time by several of their wives, we should have been ill off indeed. In the latter part of April our baggage was forwarded over the snow to the Coppermine, accompanied by Ritch, who carried with him, from the south branch of Dease River, planks for repairing the little sea-boats, when the weather became sufficiently mild for that work, in the middle of May. The mice had penetrated into our cache there, and revelled all winter upon our flour, besides cutting holes in the sails, &c.; but, upon the whole, they might have done us more damage, had they been *maliciously* inclined.

On the 1st of November we had sent to see if all was safe; at which time the impetuous Cop-

permine was already frozen to the thickness of half a foot.

In the course of the winter we received from London, by way of Canada, a dipping-needle, made by Jones, and had to regret the destruction of a mountain barometer, applied for by me in 1836. The friendly attentions of Chief Trader Ross supplied us with an assortment of periodicals, which served to beguile the almost unsupportable tedium of a second Polar winter. This season, as I have already remarked, was less severe than its predecessor; and, as if it were a consequence of the difference, the aurora was more brilliant, displaying on several occasions the prismatic hues; but the same arched form, from north-west to south-east, predominated. Every clear night, when not eclipsed by the moon, it was to be seen; but was brightest and most active in the mornings, some time before daylight. At a quarter to 4 A.M., on the 5th of March, Ritch witnessed a most brilliant exhibition. It formed a quadrant, issuing from west-north-west, and extending to the zenith. There it doubled on itself, and terminated in a semi-elliptical figure, apparently very near the earth, in rapid motion, and tinged with red, purple, and green. The half ellipse seemed to descend and ascend, accompanied by *an audible sound, resem-*

bling the rustling of silk. This lasted for about ten minutes, when the whole phenomenon suddenly rose upwards, and its splendour was gone. Ritch is an intelligent and credible person; and, on questioning him closely, he assured me that he had perfectly distinguished the sound of the aurora from that produced by the congelation of his breath—for the temperature at the time was 44 degrees below zero. I can, therefore, no longer entertain any doubt of a fact uniformly asserted by the natives, and insisted on by Hearne, by my friend Mr. Dease, and by many of the oldest residents in the fur countries; though I have not had the good fortune to hear it myself.

The winds in the early part of the winter were less violent, and blew less constantly from the eastward than in the preceding year; but with February the weather became boisterous and stormy, and continued so throughout the greater part of the season. North and south winds are of rare occurrence at any time at Fort Confidence. The east and west are the standard points; the former, as already remarked, being by much the coldest, though less decidedly so this winter than last. As for quantity, I have never known a country so windy as Great Bear Lake; a calm day scarcely happens once a month.

I had almost forgotten to say anything about my young wolves. At our return, the three survivors were already grown large lank animals, gentle, timid, crouching to and fawning upon everybody. They were particularly anxious to ingratiate themselves with the dogs, but always met a repulse; and were not unfrequently pursued into the woods, where their fleetness saved them from being worried. They themselves soon learned to chase the white partridge; but, as the snow grew deep, they wandered less and became more domestic. Their appetite was voracious, and they growled in true savage style over their food. Sometimes the dogs brought them to bay in a corner; but, when thus pressed, the wolves shewed such formidable grinders, and gnashed them so fiercely, that their persecutors were fain to stand aloof. When I happened to relieve them from this situation, the poor things would lick my hand, as if grateful for my protection. To save themselves from nocturnal attacks, they had the sagacity to take up their quarters on the top of the wood pile, whence their long melancholy howl arose at night above the clamorous serenade with which the canine species delight to entertain the residents at the trading posts. When any of the dogs followed me in my rambles, the wolves were sure to

keep out of the way; but, when they perceived me alone, they soon bounded up, seized my coat or gloves, and nothing delighted them more than a roll with them in the snow. I began early to break them in to the sledge. Moscow—the male—was very strong, and at first tolerably willing: one of the females was all fire; but the other, —the tamest of the three,—when tackled, threw herself obstinately down upon the snow, and suffered herself to be dragged for miles in that state by the dogs before she would condescend to haul like them. At last Moscow, finding his own strength, grew so vicious that we were reluctantly obliged to destroy him. After devouring their brother, the two females betook themselves to the fishery on the south side of the island, where one of them got lamed by an Indian, with whose net she was taking undue liberties.

From that time, poor Norna, the solitary survivor, was usually kept chained at the house. She continued gentle, though very timorous; but a most arrant thief when let loose: having on one occasion filched a shoulder of venison off a sledge coming to the house; on another, snatched a goose out of the hands of one of the women while plucking it; carried off several baited lines set through holes in the ice to catch trout; and played various other tricks of the same kind,

especially to the Indians. From the unconquerable aversion of the dogs to my unlucky pet, I was disappointed in obtaining from her a cross breed, *said* to have been famous in some parts of the North. As I believe that such details of the habits of wild animals are interesting to naturalists, I shall offer no apology for inserting them here.

The expedition received an important accession, this spring, in the person of Ooligbuck—one of Sir John Franklin's Esquimaux interpreters. This man had, in 1836, been written for by Chief Factor Charles, then in charge of York Factory, to the Company's establishment of Ungava, in Labrador; and, having at length reached Red River settlement, was forwarded with extraordinary diligence by Chief Factor Christie, and the gentlemen along the route,—the whole journey from the latter place occupying only three months, less eight days.

We had hoped that our difficulties would have terminated with April, but in this we were sadly disappointed. In the beginning of May, about thirty natives, from various parts along the borders of the lake, came in half-starved, and located themselves alongside the establishment. We assisted them as far as our means permitted; but it may well be supposed that a party dou-

ble our own number, and too indolent even to look out for their own subsistence, soon became an intolerable burden. They expected to be indulged with as much ammunition as they chose to ask for, as soon as the wild fowl should make their appearance in the middle of the month; a vain resource, for neither did any number of fowl pass this season, nor had we ammunition to spare for such small game: on the contrary, we were obliged on the 1st of the month to send an express to Fort Norman for a fresh supply of powder and ball.

On the 23rd, by dint of persuasion and remonstrance, the Indians were at length induced to withdraw towards Kasbah Lake—a day's journey to the northward, where we knew that at this period a good spring fishery commences. Scarcely had they been off a few hours, when one of the old men was seen returning in great haste. He began vociferating long before he came up to us, his violent gestures denoting some terrible calamity. When sufficiently near to comprehend his harangue, the first words we heard were, "They are all dead! Blacky (a young hunter) is blown up with gunpowder, and his little brothers are dead also!" and he renewed his clamour. We had at the house a smart, industrious lad, about fourteen years of age—a

brother of Maccaconce—employed as an assistant to our fisherman. "The old man does not lament hard enough," said the youth, "for any one to have died; I'll go and see." He found the Indians about three miles off, all alive and well; our friend Blacky having but slightly scorched his hands. The foolish fellow had laid some gunpowder—fortunately a small quantity—in an untied handkerchief between his legs, and, with characteristic Indian apathy, began striking fire with his steel and flint, to light the eternal pipe. To us it would scarcely seem necessary to call in the aid of superstition to account for what followed; a spark flew into the powder, and it exploded: but the old man, as if pursued by all the demons, set off for the fort, to bring us the dreadful news! It is a general rule among the traders, not to believe the *first* story of an Indian. He will tell you, on arriving, that there are no deer, and afterwards acknowledge them to be numerous: that he has been starving, when he has been living in abundance: that certain individuals are dead; yet, after he has smoked his pipe and eaten his fill, ask him what is the matter with these same persons, and he will describe some trifling ailments, a surfeit perhaps; for though, at times, these people endure with fortitude, the least sickness makes them

say, "I am going to die!"—a trait that also extends to their half-breed descendants.

Another striking instance of the native passion for bad news occurred this month. One of the old women, already mentioned as our constant house pensioners, had a daughter, and a son-in-law called "Le Grand Blanc," in a camp not very distant. Two old men from that camp, having visited the fort, told Grand Blanc and his wife, on their return, that their mother was dead, after having eaten her deer-skin robe! The pair immediately began grieving and wailing, and repaired to the fort. They found the old beldame highly indignant at her reported death. "Yes," said she, "had I remained with you, I should have been stiff enough by this time; but the whites have acted the part of relations towards me: I have never wanted for meat, or fire, or water; they have provided all that for me. And look at my robe, have I eaten it; don't you see it is as good as ever?" I do not mean to accuse the two old tattlers of any malicious intention in what they said. It never entered into their minds that such a story reflected upon our character; for this simple reason, that they would themselves have acted the unfeeling part they attributed to us, with very slight compunction.

I have now detailed the means by which we contrived to subsist during three-fourths of the year, the most important and engrossing care of an Arctic resident, but which has little to attract or interest the reader. As to the weather, it was extremely backward; the thermometer in the sweet month of May was as low as —15°, and the mean temperature of the whole month was 7½° of frost, with frequent gales and snow. Not a drop of water appeared anywhere, and on the open lake the snow was so hard frozen as to afford excellent walking without snow-shoes.

On the 28th our express-men returned from Fort Norman. Their outward journey, across Great Bear Lake, had been favourable, and they reached Fort Franklin on the 6th. There they found a wonderful change. The upper part of Bear Lake River was open, the willows had begun to bud, and all the small streams from thence to Fort Norman were swollen to such a degree, that the journey through the woods, though not exceeding fifty miles of direct distance, occupied a week; during the greater part of which they were without food, and endured incredible misery, not the least part of which was, that, though wild fowl were numerous in every swamp and pond, they were unable to pro-

cure any, from having imprudently wasted their ammunition during the passage of the lake, whilst they yet had provisions in abundance.

The ice on the Mackenzie had made its first move at Fort Norman on the 6th, but stopped again; and they crossed it on the morning of the 13th, a few hours before its final liberation. After a halt of four or five days, while the ice continued driving, they commenced their return, had to carry everything on their backs to Great Bear Lake, and to cross the various streams, as before, on rafts. Arrived at the lake, they found the ice covered with water, and the journey consequently very bad, as far as "the Bay of the Deer Pass;" where they re-entered the realm of winter, and from whence they travelled very rapidly, with their dogs, over the hard dry surface of the snow. Thus, while at Fort Norman —scarcely two hundred and fifty miles to the south-west — Mackenzie River was broken up, vegetation had made some progress, and Mr. M'Beath was dressing his garden, perfect winter still reigned at Fort Confidence; a very striking proof of the great disparity in climate between a woody and a barren country.

With June came a change, sudden, delightful, and complete. The frosts almost entirely ceased; the temperature at mid-day attained from 40°

to 70° in the shade; the snow disappeared, as though by magic, from the surface of the ice and of the ground, forming many brooks and rills of water; the willows timidly put forth their buds, and the woods grew vocal with the voice of song. Even in the remotest corners of creation, nature has its notes of praise to Him who sustains the whole. On the first day of the month I measured the ice in the strait to the eastward, where our nets were set. It was still five feet thick, but in these narrow parts was rapidly undermined by the current caused by Dease River, which broke up on the 3rd.

The change of weather brought a few Indians from the eastward with a little meat, and others, from different quarters, begging for provisions. In fact, throughout the entire season, a large proportion of our purchases from one set of natives always went in charity to another. The fish now began to come forth from the depths of the lake, and resort to the mouths of streams, where nets and lines were employed by ourselves and the natives for our daily subsistence. The unwonted fine weather seemed to animate all. Our men and the natives played at ball, and other out-of-door games. In the evening Mr. Dease's violin was oftener heard than during the

long dreary winter, and to its enlivening strains the Indian youths danced and capered in the hall. With renovated hopes and thankful hearts we prepared to try our fortune a third time on the Polar Sea.

CHAPTER XIV.

Second Descent of the Coppermine.—Interviews with Esquimaux.—Passage of Coronation Gulph, and arrival on new ground.

Our excellent assistant Ritch was left this summer, as usual, in charge of Fort Confidence, assisted by Felix and Morrison, two men specially selected for this important duty, on account of their steady, industrious habits.

On the 15th of June the remainder of the party set out on foot for the Coppermine River. The journey was pleasant enough; for, except a little snow one day, and plenty of rain another, we enjoyed fine weather, besides a pic-nic party regularly every morning and evening. We crossed mountains, swamps, streams, and frozen lakes; shot two or three deer, and—ate them; and, finding the rapid Kendall flooded, passed over on a raft, and on the 19th had the happiness to find the three men left in charge of our boats and baggage safe and well. They informed

us that the ice had ceased driving down the Coppermine on the 16th, ten days earlier than last year; and, being sensible of an equal difference in the progress of vegetation, mutual felicitations passed on the brightness of our present prospects. The next two days being very bad and boisterous, all we could do was to get the boats ready, and settle other arrangements. Our crews having undergone several changes, it may be as well here to name them over again.

1. James M'Kay,	Steersman.
2. George Sinclair,	Ditto.
3. Laurent Cartier,	Bowman.
4. James Hope,	Ditto.
5. Ooligbuck (Esquimaux Interpreter),	Middleman.
6. George Flett,	Ditto.
7. Charles Begg,	Ditto.
8. William M'Donald,	Ditto.
9. John M'Key,	Ditto.
10. John Norquay,	Ditto.
11. Larocque,	Hare Indians.
12. Maccaconce,	Hare Indians.

On the 22nd we ran down to the Bloody Fall, without stopping to make a single portage; making, in fact, light of the rapids, which the falling of the river rendered much less formidable than on the same day of the previous year, though some of them did not fail to initiate our new hands, by pouring a few harmless waves into the boats. The descent occupied nearly

eleven hours, the windings of the river greatly increasing the actual distance. Our deposit of provisions in the cleft of the rock was untouched by man or beast; but slightly affected by damp, though not nearly to the extent—one half—for which, in arranging our commissariat, we had made allowance. The rudders, masts, &c. were found safe on the islet below.

The sea-ice being still perfectly solid, it was resolved to remain a few days at the Bloody Fall, to afford me an opportunity of exploring Richardson River, discovered and named by us in 1838; this indeed was our chief reason for descending the Coppermine so early.

On Monday, the 24th, I set out with the Esquimaux interpreter and four others, and fell upon the river at the end of seven miles in a west-north-west direction. Some stout willows grow upon its banks, but it is totally destitute of wood. The masses of drift ice and deep furrows in the mud shewed that there had been an inundation of not less than thirty feet perpendicular at the recent breaking up; but since then its waters had fallen with great rapidity, and were still very muddy. From thence to the bottom of Back's Inlet, into which, as I rightly conjectured last year, the Richardson falls, is a distance of only eight miles. We came in view of the inlet from

the top of a range of rocks; and at the same moment perceived at some distance three tents of Esquimaux, two on the opposite side of the river, the third upon an island in the stream. Causing the rest of the party to conceal themselves among the rocks, I sent Ooligbuck forward alone, to inform the strangers of our visit, and allay their fears.* From our hiding-place we watched his proceedings with interest. No sooner was he seen by the people across the river than they fled towards the hills, scarcely taking time to throw down their tents, the usual signal of alarm. Equal bad fortune seemed likely to ensue at the island, the women and children running away to its farther end, whence one or two canoes stole over to the opposite side. Soon after we observed two men stop, hesitate, and at last advance to the nearest point of the island; from all which we knew that Ooligbuck had succeeded in making his sonorous voice heard across the water. I immediately proceeded with the party to the sea, only half a mile below the tents; and we made our bivouac close to the fixed ice, where we were soon joined by Ooligbuck and his new friends. They were three in number:

* He changed his long gun with a comrade for a very short one, which, in a leather cover, would, he said, look like a bow, and be less apt to attract suspicion.

an elderly man, named Awallook, who went on crutches from a dislocated joint; a fine young lad, his son; and a very stout man, about six feet high, with brown beard, and a countenance that would have been noble, were it not disfigured by a hideous wen on the temple. Notwithstanding Ooligbuck's assurances, they approached us with fear and trembling; and the first words they uttered were, "We are afraid." We caused them to sit down, and made them what little presents we could spare, and offered them some of our own fare—pemican—which they tasted, but immediately rejected as disagreeable to their palates; though they told us, at the same time, that they were badly off for food. Though the evening was very cold, they declined drawing close to our fire of drift wood; it would, indeed, have been contrary to their habits, for, from custom or necessity, these eastern Esquimaux never seem to think of fire as a means of imparting warmth. If these poor people were not far more industrious, provident, and ingenious than the Indian tribes of the interior, they could not exist in their bleak and barren country. The information they could give us regarding the coast and inland country amounted to little or nothing; the limits of their annual journeys being Berens' Isles, where they *always* pass the winter seal-hunting,

and the banks of Richardson River, to which they resort *every* summer to kill reindeer. When asked if their river did not, like the Coppermine, abound in fish, they said they had no nets, and indeed appeared poor enough; yet, for each article we gave them, they immediately offered something in return, which was generally declined.

On being questioned, Awallook told us that he had heard there were Esquimaux far west who wore labrets, but that he had never seen any himself; that he had never heard of Great Bear Lake; that none of his tribe had been killed by Indians in his time, but that he had been told by his father of the massacre at the Bloody Fall. He soon remarked, from their darker complexions, that two of my companions, Hope and Larocque, were Indians; and the slender, agile figure of the latter was strikingly contrasted with the square, rugged forms of these natives of the sea. It seemed as if, on the northern confines of a new continent, I had together before me descendants of the nomadic Tartar and the sea-roving Scandinavian, two of the most dissimilar and widely separate races of the ancient world. A goose happening to fly past, I thoughtlessly fired, and the bird fell splash into the river; at the same moment that the Esquimaux—the two younger

ones at least — tumbled over on their backs, startled at the strange and terrible phenomenon. Ooligbuck informed me that the dialect of these people differs considerably from his own (the Churchill); and that, though he understood them well enough, they had much difficulty in comprehending him, partly, I think, owing to their fears. He readily obtained permission to go and pass the night with his friends on the island, and enjoy Esquimaux hospitality. Old Awallook, it appeared, had two wives; but the young man's wife and three children were among the runaways. A score of persons flying at the sight of a single man, though a broad river flowed between, gives a most contemptible idea of their courage. The mouth of Richardson River was ascertained by observation to be in lat. 67° 53′ 57″ N., long. 115° 56′ W., variation 52° 10′ E.

Next day, on being rejoined by the Esquimaux, we walked up the river together; and, as we arrived opposite the lodge, two more men came in sight, paddling down the stream. Upon my sending one of their countrymen out to them, they ventured ashore, — a middle-aged man, and a fine frank young fellow, his nephew. The uncle proved quite a jolly character; and on Larocque's giving them a specimen of the Hare Indian dance, to set them a-going, he alone could

be prevailed on to return the courtesy. In the course of the day I despatched these new-comers to the Bloody Fall with Ooligbuck, the others being still too apprehensive to undertake the visit. Mr. Dease afterwards told me, that, though received with the greatest kindness, they for some time felt uneasy among so many strangers. He took them into his tent, and gave them food to eat. A small piece was first broken off, as a sacrifice or oblation; and the remainder made the circuit of their faces before passing into their mouths. The senior took Mr. Dease's measure for a pair of boots, in a manner that would not disparage a son of Crispin; and promised to be at the mouth of the Coppermine in the fall, to deliver them personally. Maccaconce was never so proud in his life as when the young Esquimaux consented to sleep side by side with him in the same tent. My own Indian companion, Larocque, had already made strict friendship with old Awallook's son; and thus, as far as lay in our power, was the Company's desire of promoting peace and amity between the rival races accomplished.

There being now four kayaks disposable, for these people have no oomiaks or family canoes, we lashed them together two and two, and, infinitely to the delight and amusement of the

party, paddled ourselves across the stream in true Esquimaux style to visit the lodge on the island. We found in it Awallook's two wives, so terrified that they dared not look up, but uttered, as we entered, some piteous words, meaning "Have mercy, have mercy on us!" Their deerskin tent was so small that a man could barely sit upright. Their effects were all tied up, ready for flight; and one or two little children, stowed in behind the packages, disclosed their hiding-place by crying and sobbing. After presenting the ladies with some bright buttons cut off our clothes, and patting their fine dogs, which were far handsomer than themselves, we recrossed the river. Before taking leave of these timid people, I may remark that the men were quite equal to Europeans in stature, broad-chested and full-fleshed. They were comfortably dressed in deerskins, the upper garment terminating in a tail, which in one instance closely resembled in shape that of an English dress-coat! the others were rounded off at the lower corners. Narrow strips of deerskin bound their short black hair, and they had no tonsure. They were very curious to know what strange animals produced our various coloured clothing, and seemed much interested when I desired Ooligbuck to explain to them that they were partly made of the hair of an ani-

mal, much smaller than the reindeer, spun into thread and then wove, and partly of a kind of long grass manufactured in the same manner.

We then reascended the Richardson, which, at a short distance beyond where we first fell upon it, turns away westward, flowing in a wide channel, with an almost imperceptible current, through a long plain bordered on either hand by a range of rocky hills, that slope gradually from the north, and shew an abrupt front to the south,—the general character of both mainland and highland elevations along this coast. The clayey plain and banks of the river are gashed by numerous ravines, serving as so many ducts to swell the inundation when the snow dissolves on the mountains, and were at this time so miry, that, in crossing them, we often sank over the knees in the tenacious mud.

On the 26th I continued the ascent of the river, till it separated into two branches; the principal one, as far as it could be traced, maintaining its westerly direction between the opposed lines of hills, which, at the distance of twenty or thirty miles, seemed to clasp each other, and from that junction the tranquil stream must change into a mountain torrent. Then retracing our steps in a direct line to the boats, and indulging by the way in a few "flying shots"

at deer, we reached the Bloody Fall in the course of the night.

The following day was spent by the whole party in the unwonted amusement of angling. The setting-poles were converted into ponderous fishing-rods, and with hooks baited with pieces of fat meat, or fish, we succeeded in taking several Arctic or Hearne's salmon in the boiling eddies at the foot of the fall. This surprised me, for I had hardly ever heard, whilst pursuing this favourite sport at home, of the common salmon being captured with *bait*, except when out of season.

On the 28th we descended to the island lying just without the mouth of the Coppermine, where we halted until the 3rd of July, when the first slight opening in the ice took place. A single net, set in a narrow channel that a man might almost wade across, furnished more salmon than the whole party could consume. None of these fish exceeded twelve or fifteen pounds in weight, and the largest measured exactly three feet from the snout to the tip of the tail. They seemed to me not at all inferior in flavour to the salmon of our Scottish waters.

Ooligbuck and Sinclair went to the river to the eastward, where the latter saw Esquimaux last year. On the banks of a lake some distance beyond it they found eight tents, containing six-

teen men, and about sixty persons in all; most of whom took to their heels at first, but by-and-by returned, and received our two men kindly, though they did not allow them to enter their tents. Among them was the family seen by Mr. Dease at the mouth of the Coppermine the year before, and who, as we already knew, had carried away the rich present left for them on our return from the sea.* This camp had passed the winter seal-hunting, on a groupe of islands within view of the coast, and were now bound on their annual inland rounds. They seemed rather better off than Awallook's smaller party; but our dull interpreter could add nothing to our own surmises regarding their mode of life, and the extent of their peregrinations. We had, in fact, accurately guessed the whole little circle of their lives.

Emerging from the Coppermine on the 3rd of July, our first day's progress was only five miles, the first week's but twenty, and it was the 18th before we could attain Cape Barrow. Just as we had effected a landing through the ice, an enormous mass of rock fell, with a loud crash, from one of the opposite islands, several miles distant. I seized upon this otherwise trivial incident as a

* Indeed the man acknowledged having returned with three others after his flight, and reconnoitred our encampment in the night, but was scared by seeing some one sitting at the fire.

happy omen to rally the spirits of our Indian companions, which were depressed by an evil dream that had visited one of them. He saw, in his vision, flames issuing from the mouth of a rude monumental figure of stones, erected by our people at a place where the ice detained us several days, and consuming himself with the rest of the party. When the cliff broke down, "Hark," I exclaimed, "the demon that troubled you has fallen!" After this we heard no more about him. It would have been in vain to attempt reasoning down their superstitious belief in dreams. Even the white men of our crews believed in ghosts, witchcraft, second-sight, and other similar absurdities; and nothing would induce our steersman M'Kay, though otherwise a bold fellow, to pass a single night alone.

From the rugged heights of Cape Barrow we beheld, with equal astonishment and delight, the wide extent of Coronation Gulph partially open, whereas long after this period the year before the whole party might have crossed it on foot! Besides the inferior severity of the preceding winter, the present summer was considerably warmer than that of 1838, which satisfactorily accounts for the wonderful difference in the state of the ice. The only drawback to our enjoyment of this improved aspect of affairs was the swarms of musquitoes

that arose wherever we landed, even from the stony beaches and naked rocks; but the gales and cold nights soon delivered us from this short-lived nuisance. As to the natives, their caches of blubber, sledges, &c. occupied the very same situations as last year; but they themselves had all passed inland for the summer reindeer hunt. As nearly as we could reckon, the whole population from Richardson River to Cape Barrow may comprehend about fifty tents, containing from three to four hundred souls, of whom not more than one-fourth were seen by us, as already related. I obtained satisfactory observations at Cape Barrow for the dip of the needle, which proved to be 87° 13′ N.

With the benefit of strong winds, and the facilities afforded by the extensive groupe of Wilmot Islands for evading the principal streams of ice, we safely traversed the broad inlet, and on the 20th supped at Boathaven, the place of our former weary detention. The wind here blowing very fresh off the land, we ran up to Cape Franklin, which we reached soon after midnight, just one month earlier than my arrival at the same spot with my pedestrian party in 1838; and instead of the grand strait between the continent and Victoria Land being covered with an unbroken sheet of ice, as it then was, we now

found an open channel, nearly two miles wide, extending along the main shore. The slopes and plains too wore a greener and more cheerful aspect, and the ground was comparatively dry. Besides mosses and dwarf carices, were to be seen flowers of various hues, wild sorrel, and an abundance of the Labrador tea-plant (*ledum palustre*), of very diminutive growth, but at this time covered with fragrant white blossoms. These yield a beverage less bitter and of a more delicate flavour than the plant itself.

For the next four days our progress was arrested by a violent easterly gale, which filled our tents and food with drift sand; but we had the gratification of witnessing the tail of a large body of ice arrive nearly abreast of our encampment, leaving before us a glorious expanse of water, now covered with foam.

On the 26th we again encountered the ice at Point Edwards, and encamped the same evening at Cape Alexander, alongside of much heavier masses than any we had yet seen, which in the rapid tideway had nearly crushed the boats against the rocks. In 1838, a month later, we found the strait of Victoria Land blocked up, and the sea to the eastward open; the case was now reversed. It was, however, no little satisfaction to us to observe once more *two* regular

daily tides. It was high-water to-day at noon; the flood came from the westward, but did not exceed two feet; and it was the day of full moon. The hours of the tide at Cape Alexander throughout the year, therefore, correspond with those at Point Barrow, fifty degrees of longitude to the westward. The soundings in the strait near the land had augmented from four fathoms at Cape Franklin to eighteen at Cape Alexander. The water was thoroughly salt and beautifully clear, the bottom consisting of sand or stones. Its temperature four feet below the surface was 35°, while that of the air at midday was 56°. As a substitute for drift wood, of which I well knew from last year's experience that we were no longer to expect any, we now began to use dry seaweed and dwarf willows, which, while the weather continued temperate, answered sufficiently well. The dip of the needle at Cape Alexander was 88° 15′, shewing a great stride towards the magnetic pole.

On the 27th we advanced four or five miles, in imminent peril of being carried away by the driving ice; and it was noon of the following day before we were able, by the aid of the tide, to get round Trap Cape, when we found a lane of water leading along the shore to the extreme point of my progress the previous year. The

top of the cairn erected there had fallen, having been built of round stones: but we only stopped to get sights for the watch, and to raise our portable canoe out of the sand; which done, we once more entered upon ground never yet trodden by civilized man. Since Point Turnagain, the only indications of man we had observed were some graves, with arrows and other implements. As for our deer and seal hunts, and other exploits of "venerie," I shall pass them over entirely, as they were now become mere matters of course, while our whole thoughts were bent upon subjects of far higher interest. The only fact in natural history worth recording was, that the large white-backed ducks, of which we had seen none eastward of the Coppermine in 1838, this season extended their range to Cape Alexander; probably because they now found what was then wanting—an edging of open water betwixt the ice and shore, which it is their delight to skim along.

CHAPTER XV.

Stupendous bay, broken into minor bays, and bordered by countless islands.—Discovery of the Strait of Boothia.—Back's Point Ogle doubled in a fog.—Deposit found on Montreal Island.—Cape Britannia, and discoveries to the eastward.—Progress arrested by gales.—Return.—Nearest approach to Ross's Pillar and the Magnetic Pole.—Southern shores of Boothia and Victoria Land explored.—Passage of a magnificent strait.—Winter sets in.—Re-entry of the Coppermine River.

Our course was first directed to the highest island of the Minto groupe seen by me the previous season, from whence we now obtained a commanding prospect of the bold rocky indented shores, running away much farther southward than I could have anticipated, and skirted by numerous islands. I at the same time discovered, that what I had before taken for the opposite side of the great bay that so aptly bounded our pedestrian journey, was only the outer end of a very large island, which afterwards formed a prominent object for several days, and was distinguished by the name of the prime minister of

England, Viscount Melbourne. Our first encampment was near a very bluff rocky cape, that afforded another extensive view, and was named by Mr. Dease after the noble family of Roxborough. Beyond it opened Labyrinth Bay,—a perfect maze of islands; from whence a range of picturesque rocky hills, about five hundred feet high, extended away southward till they became lost in distance.* It would be an endless task to attempt to enumerate the bays, islands, and long, narrow, projecting points that followed. The coast continued to stretch south and south-east, but lost its bold character, and became low and stony. This lowness of the land increased the intricacies and perplexity of the route, rendering it necessary to ascend every elevation that presented itself to ascertain where to make for next. We had the disadvantage, too, of some bad foggy weather; but, as long as we could pick our way through the open water among the bays and islands, we made tolerable progress. Close without, the main body of ice lay firm and heavy.

So confused were our people by the devious course we were obliged to pursue as to lose

* They were called Gloucester Hills, in honour of her Royal Highness the Duchess of Gloucester; while the large peninsula formed by Labyrinth Bay and Melville Sound received the name of her Royal Highness the Duchess of Kent.

all idea of the true direction, few of them being able to indicate it within eight points of the compass. I even overheard one stoutly maintaining, in a cloudy day, that west was east! Our Indian companions were quite as wide of the mark as the rest; and I was now fully convinced that their peculiar faculty of finding their way over pathless wilds has its origin in *memory*, in the habitual observation and retention of local objects, even the most trifling, which a white man, less interested in storing up such knowledge, would pass without notice.

On the last day of July we encamped near the mouth of a river, much larger than the Coppermine, with a strong current, that freshened the water among the reefs for some distance from the shore. Its banks appeared much frequented at this season by reindeer and musk-cattle, and no fewer than five fat bucks were killed by some of the party while the rest were pitching the tents and preparing supper. A couple of Esquimaux sledges lay by the river side; and as we had found many old stone caches, both upon islands and points of the mainland, it seemed more than probable that, like the natives near the Coppermine, the people to whom they belonged had come from their winter stations over the ice in June to ascend this fine

stream. It falls into the sea in lat. 68° 2′ N., long. 104° 15′ W., and was named after the Right Hon. Edward Ellice.* As we found nothing but drift willows on its banks, it must be entirely destitute of wood, and probably takes its rise in large lakes not far from Lake Beechey, discovered by Sir George Back. The bordering country consisted of green flats, varied by little lakes and rocky knolls. The latter, with low intervening beaches, form the general features of this part of the coast, and render it very difficult, at any distance, to distinguish the line of the mainland from a chain of islands. Our most useful rule in such cases was, that, while the former presented patches of green, the latter were in general perfectly barren. The bottom is a soft mud, and the water is discoloured and shallow, as will be seen by the soundings on the map: but, even were it otherwise, no ship would ever steer for shores so beset with hidden dangers; the first point of the mainland that she durst approach would be Cape Alexander.

The highest, lowest, and mean temperatures for July, the warmest month of the Arctic year, were respectively 77, 32, and† degrees of Fahrenheit. The winds were strong and variable. The

* The rise and fall of the tide here was two feet and a half.

† A blank in MS.

accumulating duties of the survey, and frequent want of needful rest, rendered it impossible to continue the meteorological register any longer.

From the 1st to the 5th of August we were detained, by a crush of very heavy ice, on a point that jutted out beyond all the islands. A number of observations were procured here, giving the following results: lat. 68° 7′ 8·5″ N., long. 103° 36′ 45″ W.; variation, 54° 45′ E.; dip, 88° 20′ 25″ N. The tides occurred regularly twice a-day, the rise and fall varying from 1½ to 2 feet, and the flood coming from the eastward. On this point we found the bones of a whale, and marks of the recent tents of a family or two of natives, who had left behind them the skin of a Polar bear; from which circumstance we called the spot White Bear Point.

On the 5th we worked our way out through the ice; and at half-past 10 at night, while in the act of encamping on an island in lat. 67° 56′, saw the first stars, the atmosphere being beautifully clear. Several days of remarkably fine weather succeeded, and enabled us rapidly to unravel our intricate path. Had we been enveloped in continual fogs, as in 1837, success on such a coast as this must have been hopeless; as, in addition to the perplexity of the route, the compass, from our increasing proximity to the magnetic

pole, soon became totally useless. The daily recurrence of astronomical observations was, therefore, of inestimable value; and no words can express our deep sense of gratitude to Providence for its great goodness towards us.

The coast, with its succession of bays and numberless islands, still kept edging away south-eastward, as far as Ogden Bay, in lat. 67° 36′ N., long. 101° 15′ W.; and then made a turn to the north-east. The rocks had again become somewhat bolder, with a striped and variegated surface; but the colour of the water still merited the epithet of the Red Sea, bestowed by our men upon the southern part of this stupendous bay, till near Point Johnson, when the variegated rocks gave place to a very low line of granite or gneiss, extending from east to east-south-east, bordered with very small isles of the same formation, amongst which the sea became clear as crystal. As for the main ice, it hung close upon the island fringe; but, within, we generally had the benefit of open water.

On the 8th the coast suddenly turned up northward in a fine curve, in lat. 67° 43′ N., long. 99° 15′ W.; which we denominated M'Loughlin Bay, out of respect for the officer in charge of the Columbia Department. We next reached a space clear of islands, but much encumbered with

ice, with eleven and twelve fathoms' water; and then there appeared green sloping hills and large islands, the favourite resort of reindeer. This, after a short interval of sand, was in its turn succeeded (at Point Grant) by a large tract of shingle and limestone. It was here that the traces of Esquimaux became frequent. Not a point nor an island could we land upon but exhibited *old* caches, camping-places, or graves. One of their tent sites — an oval — measured twenty feet the longest way; and in another place we found several deposits of marrow-bones!

On the 10th we proceeded north-eastward all day among the islands, and some began to apprehend that we had lost the continent altogether, till in the evening we opened a strait, running in to the southward of east; whilst the rapid rush of the tide from that quarter left no longer any room to doubt the neighbourhood of an open sea, leading to the mouth of Back's Great Fish River. The ebb left on the sandy beach many little fish, which Ooligbuck called "Oonglak," and which, he said, are highly relished by the Churchill and Ungava Esquimaux, on whose coasts they are caught of a much larger size. In this strait too we saw the first salmon since crossing Coronation Gulph. They came from under a heavy mass of ice, behind which the men were resting on their

oars; and, as seals were exceedingly numerous, there can be no question that various fish, on which they prey, abound in these transparent waters.

I must candidly acknowledge that we were not prepared to find so southerly a strait leading to the estuary of the Great Fish River; but rather expected *first* to double Cape Felix of Captain James Ross, towards which the coast had been latterly trending. The extensive lands on which that conspicuous cape stands forms the northern shore of the strait through which we passed on the 11th; and which led us, the same afternoon, by an outlet only three miles wide, to the much desired eastern sea. That glorious sight was first beheld by myself from the top of one of the high limestone islands, and I had the satisfaction of announcing it to some of the men, who, incited by curiosity, followed me thither. The joyful news was soon conveyed to Mr. Dease, who was with the boats at the end of the island, about half a mile off; and even the most desponding of our people forgot, for the time, the great distance we should have to return to winter quarters, though a wish that a party had been appointed to meet us somewhere on the Great Fish River, or even at Fort Reliance, was frequently expressed. Point Seaforth—the eastern outlet of

this remarkable strait—is situated in lat. 68° 32′ N., long. 97° 35′ W. On the continent, on Ross's Land, and on the larger islands, reindeer were seen browsing the scanty herbage that springs up amongst the shingle; and stone marks, set up by the natives to deceive or decoy them, appeared in many well-chosen places. While pursuing a small herd, seen from our encampment, about twelve miles south-south-east of the strait, I had a fine view, from an eminence, of the inland country, rising into stony elevations, shaded with green and diversified by many small lakes.

The 12th of August was signalized by the most tremendous thunderstorm I ever witnessed in these northern regions, accompanied by torrents of rain, and some heavy showers of hail. I afterwards ascertained that this storm passed violently over Great Slave Lake, and lightly over Fort Simpson on Mackenzie River, the day before—the 11th; appearing in both cases to come from the north-east, while, with us, it came in the opposite direction. It must, therefore, have travelled from south-west to north-east, with a rotatory motion, agreeably to the theory of Colonel Reid. Towards evening, when its fury was somewhat spent, I took advantage of the impossibility of proceeding to make a set of observations with the dipping-needle. The result, considering the

highly electrical state of the atmosphere, was satisfactory, the dip being 89° 29′ 35″ N.; the variation, taken roughly with the horizontal needle of the instrument, and a single glimpse of the sun about 6 P.M., from one to one and a half points easterly. Thunder Cove—the snug little nook in which we lay—is one hundred and five miles S., 7° W., from Ross's magnetic pole. It may be proper to remark, that here, as upon every other occasion, the observations were conducted on a sandy beach, two or three hundred yards removed from the boats and encampment. The instrument was levelled on a stout wooden stake, firmly driven into the sand; and there was not the smallest article of iron either about the tent or my own person. The vertical vibrations of the needle were as free, and performed in almost the same time, as at Fort Confidence and the intermediate places.

On the 13th it blew strongly from the westward, with a very dense cold fog, that prevented our starting till 8 A.M. We then ran rapidly south-east and east, and at the end of fifteen or twenty miles got clear of the countless islands that had all along, from my last year's pedestrian limit, embarrassed us beyond measure, and hailed with real transport the open sea, though mantled in fog. After rounding a long point, we sailed

some distance down a seemingly deep bay, which, as soon as we could make out land on the opposite side, we crossed, and then coasted along the flat shore, which was bristled with shoals and breakers. On doubling a very sharp point, that offered a lee spot for the boats, I landed, and saw before me a perfect sandy desert. *It was Back's Point Sir C. Ogle that we had at length reached.* M'Kay and Sinclair did not at first recognise the place, in consequence of the thick fog: nor could I venture at the time to assert its identity, as we had made a long run from Thunder Cove, without either sun or compass to direct us; having, for our only guide, the direction of the wind when we set out in the morning, with the various tacks we had made, and the time occupied on each. We continued on to the southward till past 10 P.M., when the darkness, the rocks, and the increasing gale compelled us to put ashore—as it afterwards proved—beyond Point Pechell. Our long shivering fast was not compensated by the usual warm evening meal. The little store of wood we had carefully hoarded up in the boats being entirely spent, pemican and cold water formed, for some time, our standing fare. The want of even good water had been not unfrequently felt, particularly whilst we were amongst the rocky and shingle islands.

A genuine north-easter raged during the two following days, when our new hands first beheld the northern ocean in its majesty, rolling in a heavy surf upon the beach.

On the 15th the storm chased away the fog, and two deer were killed; but, as might have been expected from the surrounding sterility, they were very lean. A young Arctic fox was caught by one of the Indians, and, after being fondled and fed, the pretty little creature was restored to liberty.

The weather becoming moderate on the 16th, we directed our course, with flags flying, to the Montreal Island, which had been distinguished from the main shore. Shortly before noon we landed in a little bay, where Sir George Back encamped, on his return from Point Ogle to the Great Fish River. Directed by M'Kay, our people soon found a deposit among the rocks, containing two bags of pemican, several pounds of chocolate, two canisters of gunpowder, a box of percussion caps, and an old japanned tin vasculum inclosing three large fish-hooks. The pemican, or "taureau," as the voyageurs call it, was literally *alive;* and it was wittily remarked, "L'isle de Montreal sera bientôt peuplée de jeunes *taureaux*." The chocolate, though wrapped in oil-skin, was so rotten, that our men could

scarcely extract "a kettle-full" out of it to celebrate the grand event of the day. As for the minor articles, Mr. Dease and I took possession of them, as memorials of our having breakfasted on the identical spot where the tent of our gallant, though less successful, precursor stood that very day five years before.

Finding it impossible to reconcile Back's longitude of the Montreal Island with that assigned by Franklin to Point Turnagain, I have adhered to my own observations, which agree closely with the latter. The longitude of the island will thus be 96° 24′ 45″, instead of 95° 18′ 15″; and the extent of our discoveries be diminished by about twenty-five miles.

All the objects for which the expedition was so generously instituted were now accomplished, but Mr. Dease and myself were not quite satisfied. We had determined the northern limits of America to the *westward* of the Great Fish River; it still remained a question whether Boothia Felix might not be united to the continent, on the other side of the estuary. The men, who had never dreamed of going any further, were therefore summoned, and the importance of proceeding some distance to the eastward explained to them; when, to their honour, all assented without a murmur. A fog that had

come on dispersed towards evening, and unfolded a full view of the picturesque shores of the estuary. Far in the south-east, Victoria Headland stood out; so boldly defined, that, even without the help of the chart, we should have instantly recognised it from Back's exquisite drawing. Cape Beaufort we almost seemed to touch; rocky islets here and there studded the gulph; and with the telescope we were able to discern a continuous line of high land, as far round as north-east, about two points more northerly than Cape Hay, the extreme eastern point seen by Sir George Back. This being ascertained, and the men having had their supper, we struck out for the farthest visible land, at 9 P.M., or about half an hour after sunset.

It was a lovely night. The fury of the north lay chained in repose. The Harp, the Eagle, the Charioteer, and many other bright constellations gemmed the sky and sparkled on the waters, while the high Polar star seemed to crown the glorious vault above us. The passage occupied six hours' unremitting labour at the oar; and long before morning we were almost drenched with the heavy dew, whilst the rising swell indicated the approach of another gale.

Just at sunrise on the 17th I climbed the bluff cape to which our course had been directed,

and saw the coast turn off sharply and decidedly eastward. Thence, round to the north-west, stretched a sea free from ice, and devoid of all land, except what looked like two very distant islands. On the rocky summit, about two hundred feet in height, the natives of this barren region had erected a ponderous stone slab for a landmark. Some of their old encampments were found in the valley below, also several stone forms for building skin canoes. A line of blue hills rose, and spread away, in the south. Observations were obtained, placing this remarkable and singularly shaped cape in lat. 68° 3′ 52″ N., long. 95° 41′ 30″ W. The azimuth compass, by Jones, settled exactly in the true meridian, and agreed with two others, by the same maker, placed on the ground. The promontory was, in consequence, at first called Cape No Variation; subsequently altered to Cape Britannia, in affectionate remembrance of our native land, whose glory we trust may never know change or decay.

The cruel north-east wind having again arisen, we were only able to attain the farthest angle of the cape, about three miles distant, where we remained wind-bound for two days. Here the dip of the needle was found to have decreased to 89° 16′ 40″, as might have been expected

from our increasing distance from the magnetic pole. The rise and fall of the tide scarcely amounted to one foot, probably because the gales from sea kept the water constantly in. A couple of deer shot by our hunters were in wretched condition. The refuse of the meat soon attracted several white wolves; one of which attempted to drag off a head and antlers entire as I came up, but dropped his heavy booty before I got within sure distance. The interior country is chequered with little lakes; and green swamps interpose between the hills of naked granite. On the beetling rock that sheltered our little camp from the sea, and forms the most commanding station on this part of the coast, we erected a conical pile of ponderous stones, fourteen feet high; which, if it be not pulled down by the natives, may defy the rage of a thousand storms. In it was placed a sealed bottle, containing an outline of our proceedings; and possession was taken of our extensive discoveries, in the name of Victoria the First, amidst the firing of guns and the enthusiastic cheers of the whole party. It was only on occasions like this that we regretted the want of any kind of liquor with which to treat our faithful crews. At this time we were not a little concerned at Sinclair's being attacked by a fit of illness. This man, active, careful, and

ambitious in the discharge of his duty, proved unable to endure the deprivation of fire and warm food. Some medicines, seasonably administered, brought him round; and, in fair weather, we managed to gather moss and dry seaweed enough for the preparation of our meals, which happily prevented others of the party from being laid up.

On the 19th, the wind having shifted to E.S.E., we set out at an early hour. Crossing a small inlet adjoining our encampment, we opened a fine bay, where the sea ran strong and high. For three hours our poor fellows pulled into the bay with great spirit, hoping to gain some shelter from the land; while Mr. Dease and myself had no sinecure in baling out our old and leaky boats. At last, finding that we receded instead of advancing, sail was hoisted, not in the expectation of gaining the opposite point, but with the resolution of at least *seeing* beyond it, and then putting about for Cape Britannia, should it be found impossible to land. As we advanced, the coast began to rise more and more outwards, till at last it assumed a north-east bearing; and, after a fine cool run of thirty miles, we made the land to breakfast at 4 P. M. on a cape called Cape Selkirk, after the noble Earl of that name.

This point is formed of lime and sand-stone, through which protrude huge granite boulders, of every grain and hue. We then advanced six miles farther, with the oars, along the shore, which now trended E.N.E.; a flat barren limestone tract. In the night some flocks of Canada geese flew over the tents southward; a sure sign of an approaching change in the season.

Next day (20th) the wind returned to its old quarter, and after buffeting the waves, among shoals and breakers, for three miles, we were compelled to put into a small river, that opportunely presented a deep channel. It was now quite evident to us, even in our most sanguine mood, that the time was come for commencing our return to the distant Coppermine River, and that any further foolhardy perseverance could only lead to the loss of the whole party, and also of the great object which we had so successfully achieved. The men were therefore directed to construct another monument in commemoration of our visit; while Mr. Dease and I walked to an eminence three miles off, to see the farther trending of the coast. Our view of the low main-shore was limited to about five miles, when it seemed to turn off more to the right. Far without, lay several lofty islands; and in the north-east, more distant still, appeared some high blue

land: this, which we designated Cape Sir John Ross, is in all probability one of the south-eastern promontories of Boothia. We could therefore hardly doubt being now arrived at that large gulph, uniformly described by the Esquimaux as containing many islands, and, with numerous indentations, running down to the southward, till it approaches within forty miles of Repulse and Wager bays. The exploration of such a gulph, to the Strait of the Fury and Hecla, would necessarily demand the whole time and energies of another expedition, having some point of retreat much nearer to the scene of operations than Great Bear Lake; and we felt assured that the Honourable Company, who had already done so much in the cause of discovery, would not abandon their munificent work till the precise limits of this great continent were fully and finally established. I must here be allowed to express our admiration of Sir John Ross's extraordinary escape from this neighbourhood, after the protracted endurance of hardships unparalleled in Arctic story. The mouth of the stream which bounded the last career of our admirable little boats, and received their name, lies in lat. 68° 28′ 23″ N., long.* 94° 14′ W.;

* Adopting Back's position of the Montreal Island, this longitude would be 93° 7′ 30″ W.

variation 16° 20′ West. Here, as indeed wherever we landed, appeared old stone circles, traps and caches, but no *recent* traces of inhabitants were discoverable.

The strong wind, that had forbidden our advance, gave wings to our retreat, and bore us the same night back to Cape Britannia. Early next morning we stood out direct for Point Ogle; but, the wind shifting more to the north, we were only able—though carrying sail till the old boats creaked again—to make Point Pechell, which we reached in four hours and a half, the width of the inlet being eighteen miles. Poor Ooligbuck and Hope suffered severely in the heavy sea; and it must not be supposed that our crews, though good and true men in their way, were all good sailors. Besides the steersmen, we had, in fact, but two Europeans in each boat, entitled to the name; the remaining six, comprising a Canadian, an Iroquois, a Cree, two Hare Indians, and an Esquimaux, knew about as much of handling a sail, as they did of geography or geology.

On the 22nd, cutting off Point Ogle by making a portage over a narrow neck of sand, we turned down a deep inlet, thinking it might possibly communicate with Wilmot and Crampton Bay, on the western side of the peninsula, which we

had the honour of naming after her Majesty Queen Adelaide. As we passed down, in a south-westerly direction, M'Kay and Sinclair pointed out to us the sandy knoll—called Mount Barrow—from whence they returned, when sent forward by Sir George Back from Point Ogle to view the coast.

The following day we got no further than Point Richardson, under shelter of the land.

From thence we crossed over, on the 24th, to what had from the continent looked like islands, but which I had rightly conjectured to be part of the southern shore of Boothia. This shore we had the satisfaction of tracing, for nearly sixty miles, till it turned up to the north, in lat. 68° 41′ 16″ N., long. 98° 22′ W., only fifty-seven miles from Captain James Ross's Pillar. The dip of the needle, here, was 89° 28′ 45″ N.; the variation four points easterly; and the magnetic pole bore N.N.E., distant ninety miles—which was our nearest approach to that mysterious spot. The objects seen on this coast are easily enumerated. A limestone country, low and uninteresting, but abounding in reindeer, musk-cattle, and old native encampments. To seaward a good deal of ice appeared, and vast numbers of snow-geese passed high overhead in long triangular flights, bound for milder skies. While employed in

taking observations, our people erected another lofty cairn, to commemorate our discoveries; and the place was called Cape Herschel, after that distinguished astronomer.

Then recrossing the strait, which is here, as at Point Richardson, ten miles in breadth, we resumed for a while our outward route, only keeping more along the seaward verge of the islands, so as to shape a straighter course. We thus fell in with several places that had been occupied by Esquimaux during the preceding spring; and found two or three caches of blubber, snow-shovels, &c. These spots afforded what was now of the utmost value to us, chips of the drift wood which the natives had been fashioning into sledges and various utensils. From such appearances we judged these people to be pretty numerous; that they never assemble in large parties; and that each family, or little band, has its inland beat, to which they resort in summer to hunt reindeer, and provide themselves with warm clothing for the ensuing winter, when they withdraw to their respective groups of islands, to pass that long and dreary season, as best they may, in killing seals, which abound in these seas.

The weather, latterly boisterous and threatening, now became unequivocally severe. On the three last days of August we had many heavy

snow-squalls, attended with sharp frost; and, as the winds were perseveringly adverse, our progress homewards was miserably slow.

On the 1st of September the west wind increased to a strong gale, and next morning (at Point Bowes) we awoke amidst perfect winter, the rocks on which we lay being covered with snow, and the pools among them frozen strong enough to bear a man. The storm turned to the north-west, and became more furious; and several of our company recalled to mind that we were still five or six hundred miles from our Arctic home.

On the 4th the weather began to moderate, and I walked to a hill about four miles distant, to obtain a view of the interior country. It presented no new feature, and consisted of rocky heights, with intervening swamps, and many small lakes; where a few does with their fawns cropped the stunted and withered herbage. Along shore the water, stirred up from its muddy bottom by the gales, was of a dark red; but to seaward the separation of this turbid colour from the clear green was marked by a long continuous line.

The north-west gales were now happily succeeded by strong breezes from the opposite quarter, which brought us one more week of fair weather. On the 5th we ran a little way up

the Ellice, the principal channel of which has two fathoms on the bar, and five within; the breadth varying from a quarter to half a mile. Then, forsaking the continent altogether, we made for Melbourne Island, which we reached next day, and coasted for above twenty miles. It presented nothing more remarkable than some hills clothed with the new-fallen snow, between which and the sandy beach stretched almost impassable quagmires. A well-trodden deer-path wound along the base of the rising grounds, but the animals themselves seemed to have already recrossed to the main land.

At sunset, on the 6th, we stood out almost due north for the nearest point of Victoria Land, named Cape Colborne, after the heroic defender of Canada: this point proved to be fully twenty miles distant. I have seldom seen anything more brilliant than the phosphoric gleaming of the waves when darkness closed in. The boats seemed to cleave a flood of molten silver; and the spray, dashed from their bows before the fresh breeze, fell back in glittering showers into the deep. It was a cold night; and, when we at last made the land, cliffs faced with everlasting ice obliged us to run on for a couple of leagues before we could take the shore with safety. This is indeed a bold coast. Frequently no bot-

tom could be found with thirty-five fathoms of line; and the cerulean blue colour of the water, especially in the bays, indicated a profound depth.

On the 7th and 8th we crossed two magnificent bays, named after his Royal Highness of Cambridge, and the illustrious Duke of Wellington. At the bottom of the first stands Mount Pelly, an enormous perpendicular mass of rock, fronted by a low beach, which led to my mistaking the mount, when seen from the continent in 1838, for a *cape*, and the bay for a *strait*, separating Victoria Land from a nearer island. Wellington Bay, twenty-two miles wide, and apparently running an equal distance inland, stretches northward to 69° 30′, the highest latitude of this voyage. It is crowned by a range of snowy mountains, which received the name of his Royal Highness the Duke of Sussex. Its eastern cape (where we breakfasted) is formed of huge blocks of red sand-stone, amongst which was discovered a small cavern, entered by the sea. But what rendered the place still more interesting, was my finding, as I walked along the bay, the site of two or three old snow-huts on the banks of a little lake, under shelter of some overhanging rocks. Not far distant were deposits of oil, a wretched sledge, whalebone

drying-frames, stone lamps, and other utensils, horns of the musk-ox, with pieces of wood carefully reserved for working up into implements necessary to the existence of the owners. A whole array of marks stood upon the stony heights adjoining, most of which pointed south-east towards Cape Alexander, the nearest part of the mainland. Other caches of the natives, with similar contents, were found elsewhere; and an arrow, sparingly headed with copper, was picked up on the beach. A few awls, iron hoops, &c. were left for these poverty-stricken beings; and we amused ourselves with imagining their wonder, their exclamations, their jumps and gestures, on opening their stores, and finding in them these strange articles, whose presence they will doubtless ascribe to supernatural agency.

In consequence of sailing too late, we got amongst shoals on the night of the 8th, and had much difficulty in effecting a safe landing through the breakers. The men declared that the chill of the salt-water "cut them to the heart" as they waded ashore with the baggage, preparatory to hauling the boats on dry land; a precaution that the length of the nights had, for some time, rendered necessary. From Cape Peel,* westward, the land rises from the beach

* Called after the distinguished statesman.

in shingle slopes or steps, scarred by dry ravines, to the height of a hundred or a hundred and fifty feet. Next day, at noon, we found ourselves nearly opposite Cape Franklin, at a distance, by observation, of twenty miles. Then crossing Byron Bay, which is nine miles wide, and was named after the immortal bard, the land turned down south-west. We traced it till it began again to diverge to the northward of west, at the farthest high point seen by me from Cape Franklin the year before, and honoured with the name of his Majesty King Louis-Philippe.

We had now explored the southern shore of this vast island, including the eastern and western visible extremes,—respectively denominated Point Back and Point Parry, in compliment to these celebrated navigators,—for the space of one hundred and fifty-six geographical miles. It probably exceeds Boothia in size, and is separated from it by a wide arm of the sea, down which came the heavy press of ice that detained us in the beginning of August at White Bear Point. From the quantities of ice that linger between the Coppermine and Bathurst Inlet, I should infer that Victoria Land is, in like manner, divided, on the western side, by another wide opening from Wollaston Land, the last of the

great insular series, beginning with Cockburn Island, that lie off the north-east shores of America.

Many deer were seen on Victoria Land, some of which already appeared in their winter garb; and Arctic foxes and Alpine hares — the latter perfectly white — also abounded. Great white owls (*strix nyctea*) sat perched on every knoll, and on the borders of lakes numerous snow-geese had bred. Some pintailed and myriads of large brown sea-ducks were congregated along-shore, and the merriment of our crews was excited by seeing one of the latter rise with a long Esquimaux arrow protruding from her tail. We tried to shoot this queen-bird; but misfortune had rendered her wary, as she kept ahead of the rest of the flock, with small chance, however, of reaching winter quarters.

At 8 A. M. on the 10th we quitted this noble coast, and, favoured by a strong E.S.E. or side wind, struck out for Cape Barrow, which, by computation, lay S. S.W., distant fifty miles. Old and worn-out as our little boats were, they crossed this truly magnificent strait in a style surpassing our most sanguine expectations. About midway a large seal, who was enjoying a comfortable siesta, his flippers turned to windward and

his nose to the sky with a most audible snore, was treacherously shot by two of my men, at the same instant as we darted past. Unlike those pierced through the head while awake, this monster floated dead on the surface; but the waves were too rough to admit of his being taken on board, which I regretted, on account of his handsome spotted hide. . . . . .

At the end of thirty miles we fell in with the first islands, which stretch from thence, in a chain of stratified trap cliffs, to within a league of Cape Barrow. Passing this bold headland at sunset, we ran on as far as Wentzel River, which we reached at 10 P.M., and encamped. Our poor fellows absolutely capered and whooped for joy on finding the beach strewed with drift wood, and enjoyed once more the luxury of a rousing fire, to which we had been strangers since crossing Bathurst Inlet in July.

Next day we were again under sail with the dawn, 4 A.M., and were felicitating ourselves on our extraordinary good-fortune, when the lowering sky and cross swell, that succeeded a suspicious lull, too plainly told us of an approaching change. Before evening a furious north-west gale suddenly sprang up, and raised so heavy a surf upon the rocks as rendered it a critical

business to find a landing-place on the exposed coast, half-way between Cape Barrow and our desired refuge, the Coppermine River.

Stress of weather sadly retarded our return. The last of the Canada and snow geese quitted the shores of the Polar Sea, and our deer-hunters' excursions were fruitless, the animals having already made a move inland. One night there was a most superb display of the aurora, without the prismatic tints; and on another, that was pitch-dark, the flashing of the sea almost rivalled that strange lustre of the heavens. We pursued our way unremittingly night and day, fair and foul, whenever the winds permitted; and on the 16th, in a bitter frost, and the surrounding country covered with snow, we made our entrance into the Coppermine, after by far the longest voyage ever performed in boats on the Polar Sea, the distance we had gone not being less than 1408 geographical, or 1631 statute miles.

CHAPTER XVI.

Wintry return to Fort Confidence.—Passage of Great Bear Lake, and ascent of the Mackenzie.—Arrival at Fort Simpson, and journey on the snow from thence to Red River.

ASCENDING to the Bloody Fall on the evening of the 16th of September, the first thing we saw was a long pole, to which was attached the pair of boots promised by the "Dancer," as we called him, to Mr. Dease in June. Though he and all his friends had already taken their departure, the Dancer will be no loser by this extraordinary trait of good-faith. At the Bloody Fall we left one of our sweet little craft, the sails, masts, ironworks, some dressed leather, skins, old nets, and oil-cloths, besides the surplus of our pemican,* which, from age and long exposure to sea-damp,

* Total consumption on this voyage:

15½ bags of pemican.
4½ ditto of flour.
1 ditto of grease.

21 pieces, or 6 per month.

was become very mouldy. The whole was securely covered up, and will prove a valuable acquisition to the poor natives, who are not likely soon again to see the face of a white man.

With the strength and dexterity of our double crew the remaining boat was worked expeditiously up the stream. Escape Rapid was passed, and the first little withered trees attained on the 17th. It was completely winter. Snow continued falling and driving before the wind; the frost was severe and permanent. From the ledges of the cliffs hung enormous clusters of icicles; and the tracking-ground became doubly dangerous, the rocks being in many places sheeted with ice. Poor Ooligbuck nearly lost his life, in consequence of becoming giddy while climbing a steep place which the rest of the party had surmounted. Fortunately he retained presence of mind enough to cast himself flat on the point of a rock and bellow for assistance. The alarm being given, two or three of his companions hurried back, and hauled him up with a rope. Our Hare Indians were nearly as bad crag-climbers, and were of very little service in this part of the journey. The river was considerably higher than in the preceding September; and the power of the water so great, that the towing-line, formed of the spliced rig-

ging, twice snapped asunder. To Mr. Dease and myself, who walked across the country, each in his own direction, the severe weather was rather advantageous than otherwise, as the swamps were frozen, and the snow on the hills was not yet sufficiently deep to impede our progress much.

The day we left the Bloody Fall, while still together, we gave chase to a huge grizzly bear, that terror of the Indians. Bruin, with his shuffling gait, proved too nimble for us, and four shots were fired after him without effect. We followed up his track for some distance, thinking he was wounded, but in vain: his foot-prints in the snow measured fifteen inches by six! The monster had been amusing himself with digging up marmots and lemmings; the deep furrows in the frozen ground, and the large stones removed, bearing witness to his prodigious strength.

All the birds of passage had fled; the only species that remained being ravens, owlets, snow buntlings, and partridges, now white. There were few deer near the coast; but among the Copper Mountains, which I crossed on the 20th, the bucks and does were congregating in great numbers. That evening we reached the point where our over-land journey to Great Bear Lake was to commence. Here our remaining boat, our

tents, powder, ice-trenches, in short, everything but books, instruments, and absolute necessaries, were shared between our two faithful Hare Indians, Larocque and Maccaconce, who were to return to the spot with their friends at some future day for this valuable present.

The fore-part of the 21st was employed in preparing for the journey across the barren grounds. Every man provided himself with a lump of pemican proportioned to his appetite; and, after bidding a last adieu to the Coppermine, and our forlorn and deserted little bark, we set out for Kendall River. Stopping on the way to quench our thirst at a brook, we were surprised, on breaking the ice, to see a swarm of small fish dart past, which from their shape and colour we concluded to be the fry of the Arctic salmon. Though piercingly cold, we set to work amongst the stones, and in a short time caught a sufficient number with our hands (*Scotticè* gumped) to furnish us with a luxurious supper. Our fire that night, on the south bank of Kendall River, attracted to us six young Indians, whom Ritch had despatched a week before to bring us news of the arrival, on the 8th, of the fall-boat from Mackenzie River. Their assistance was most acceptable to our people, as the snow lay deep on our line of march.

On the 22nd and 23rd we bivouacked on the south branches of Kendall and Dease Rivers, in the only two clumps of pine on the route. The snow continued falling, and it drove before the biting north and west winds; and often, when we were plunging over the knees in mountain hollows, or amongst the rocks, vain regrets were muttered at having left our snow-shoes on the coast. We, however, trudged on stoutly, crossed many small lakes on the ice, and were glad to find much less snow on the Bear Lake side of the height of land.

On the 24th we breakfasted at the somewhat early hour of 3 A.M., being resolved to reach the establishment by a forced march. On the way we picked up several more Indians, who proved a hinderance to us, as some were suffering from having had their feet frost-bitten before they joined us. This was a most bitter day of wind and frost on the bare hill-sides. At noon we gained the shelter of the woods that fringe Dease River, near the "Old Man of Hoy." There we made a fire to thaw and dry our shoes, and wait for stragglers. Then, directing our course for the lower rapid, we found a boat lying ready for us, into which the whole party — now numbering twenty-eight souls — embarked; and in the teeth of a strong north-west gale, with blinding snow,

and a temperature of 14°, we reached at dusk the friendly shelter of Fort Confidence.

Its solitary inmates rejoiced at our return; and for once we learned, without apprehension, that the fall fisheries were a total failure. I despair of conveying an idea of the scene enacted by the natives during the two following days, which were occupied in settling with them, and packing up our own goods. They hurried in from all quarters; and, as everybody wanted everything, the distribution of our commodities was rather a difficult problem. As for the clamour of young and old, Bedlam itself cannot match the ordeal we underwent. Ritch having already recompensed the Indians for all services rendered during the summer, the supplies we were now enabled to dispense were mostly gratuitous. Our spare guns, kettles, ironwork, dogs, and sledges were given to the most deserving: all were furnished with ammunition for hunting their way to the regular trading-posts on the Mackenzie; our old clothes graced the persons of our young fellow-travellers; and last, not least, the whole assemblage was abundantly fed.

In the afternoon of the 26th this noisy scene was brought to a close, and we took a last leave of Fort Confidence. Larocque and Maccaconce, some of the old men, and the youths who had

been most about us, appeared affected as we shook hands with them; but all the rest were too busily engaged in rifling our forlorn abode to notice our departure. Even before finally quitting the house, the parchment windows were cut out by the women and children; the legs of the few miserable chairs and tables were torn off; and, by the time we were out of sight, I verily believe that not a single nail remained undrawn, or a scrap of any sort unappropriated, on the premises.

Including four servants and three Indians from Mackenzie River, our party numbered twenty-six souls, besides twenty dogs. The Goliah and the Fort Simpson boat carried us all. Our passage across Great Bear Lake was cold and boisterous in the extreme. For four whole days we were unable to shew our faces to the wintry storms; and in crossing the wide traverses of the lake we took in much water, which, freezing as it fell, converted the sails, oars, cordage, the boats themselves, and everything in them, into shapeless masses of ice. But so happy were all at the prospect of quitting this dismal region, that the present hardships were borne with the utmost good-humour. We even found subject for mirth in the mishaps of those whom the rude waves splashed over, converting their outer garments

into unseemly humps and concretions of ice. Some, who lay down in this condition against the sides of the boats, got firmly frozen to the planks; and a wag remarked to his comrades, "It's all up with us, boys! don't you see we are *fast* already?" Our canine companions too were transformed into the most grotesque objects. In the body of the lake, betwixt Cape M'Donell and the Scented-grass Mountain, white partridges lay dead upon the waves, having been drowned in attempting to cross over in the stormy weather.

The bay of Fort Franklin was much encumbered with ice as we crossed it to the river-head on the evening of the 4th of October. It was, indeed, high time for us to escape from Great Bear Lake; for the temperature, which was —4° when we encamped, fell ten degrees lower in the course of the night, and the vast lake shut its portals behind us. We descended Bear Lake River amongst thick driving ice; but on reaching the Mackenzie, on the morning of the 6th, were rejoiced to find its majestic stream still clear, though lined with ice and snow. There was, in fact, a sensible diminution of the cold immediately on issuing from the northern tributary.

Nearly the whole of the following day was spent at Fort Norman in thawing the boats with

fire, by which process we relieved them of at least a ton of ice. The baggage was at the same time dried, and various articles left behind, to lighten the boats as much as possible; since the very early and rigorous commencement of the winter threatened serious obstructions on the voyage to Fort Simpson, still before us. Mr. M'Beath had been unusually successful with his garden, and treated us to some tolerable potatoes, the first vegetables we had tasted for more than two years.

After three days' tracking the weather resumed all its severity, accompanied, fortunately for us, by violent northerly winds, which, while they shattered and dispersed the rapidly forming ice, enabled us to stem the current under close-reefed sails. The boats once more became uncouth masses of ice, and nearly all our people suffered from acute pains and swellings in the limbs, caused by the excessive cold. We saw a good many Indians, who supplied us with some fresh moose meat, of which they appeared to have an ample store.

At noon of the 14th, after forcing our way, at no small risk, through the torrent of ice poured out by the River of the Mountains, we reached Fort Simpson, to the surprise and joy of our

valuable friend Chief Trader M'Pherson, who had for some time abandoned all hopes of our arrival this year.

The ice continued driving down the River of the Mountains till the 3rd of November, when it finally stopped; and, nineteen days later, the broad surface of the Mackenzie itself became one solid rugged mass, the temperature at the time being below —20°. Mr. M'Pherson informed me that the coldest winter-winds felt at Fort Simpson are the south-eastern, being those which blow over the frozen expanse of Great Slave Lake; while the westerly, which descend from the Rocky Mountains, sometimes produce a thaw! The variation of the compass I found had decreased from 37° 10′ in June 1837, to 35° 15′ in October 1839.

The winter subsistence of the few people who are enabled to remain at this establishment consists almost wholly of fish, brought down in boats from Great Slave Lake by the last open water. Mr. M'Pherson had, indeed, succeeded this season in raising five hundred bushels of potatoes; but these, and other vegetables, are considered by the voyageurs and their families throughout the country as merely *extra* to the almost incredible rations of fish and flesh which they consume. Our evening recreations at

Fort Simpson were chiefly musical; and, as Mr. M'Pherson's cook excelled on that martial but decried instrument the bagpipes, the people were frequently entertained with a dance in the hall. My own time was fully occupied in completing the calculations, and drawing the map of our eastern discoveries.

Winter travelling with dogs being impracticable through the dense and fallen woods which cover the face of the country, I was obliged to wait till the river-ice was considered safe, and sufficiently covered with snow.

On Monday the 2nd of December I took leave of my kind friends, and set out for Great Slave Lake with a party of ten men, partly belonging to the expedition, partly to Fort Simpson. We found the ice terribly rough, tossed up like the waves of the sea; proving the struggle made by the mighty stream against the all-conquering power of the frost. It often required a couple of men, walking ahead with axes, to hew a way for their companions and the dog-sledges; and on one occasion we had to mount the steep bank of the river, and cut a lane through the woods. Some of my men lagged very much, through fatigue; but on the eighth morning the whole party, with one exception, reached "Big Island," which divides into two

huge arms the waters of Great Slave Lake as they pour into the Mackenzie.

Here I found Mr. Mowat, with about twenty men,—all the spare hands of Mackenzie River district,—fishing for their subsistence; also several Indian families, living in the same manner. I had brought with me several nets and other necessaries for this party, which was now increased by several of my men. With the rest I crossed Great Slave Lake, which was nearly as rugged as the Mackenzie itself; rendering it necessary to steer straight out from each encampment, and not approach land again till the evening. I generally roused my companions at 2 A. M., and in about an hour we had our fire kindled, breakfast despatched, and commenced our day's journey; which continued till after sunset, without any other interruption than stopping to drink at cracks in the ice.

From Fort Resolution, which we reached at noon on the 13th, I sent back the expedition men and dogs; with instructions to employ the month of January in making caches of fish from Big Island, at daily stages, down the Mackenzie; and about the 1st of February to repair to Fort Simpson, for the purpose of conveying Mr. Dease and family from thence to Athabasca. I retained with myself our two steersmen, M'Kay

and Sinclair, in order that the poor fellows might have the earliest opportunity of rejoining their families at Red River. A cariole and dogs, the valued gift of my friend and relative Mr. M'Pherson, materially lightened my own fatigue: for when the road was good I rode; when bad, I put on my snow-shoes.

Starting again on the 28th, and travelling with great rapidity, I entered the romantic Clear-water River on the 1st of January, crossed the lofty ridge of Portage la Loche on the 3rd, and in the dead of night on the 5th, after a day of seventy miles with two of my companions, reached Isle à la Crosse. My worthy friend Mr. Mackenzie was astonished to learn that I had accomplished in nine days a journey never before performed under eleven or twelve, and more frequently occupying fifteen or eighteen. Our reception, as usual, was most hospitable; and the fatigue of my party, the rear-guard of whom arrived the following evening, did not prevent their enjoying *a ball and tea-supper*.

Quitting Isle à la Crosse on the 8th, I travelled to Carlton with a party which is annually sent across to the Saskatchewan to fetch grease for making pemican. We reached Green Lake on the second day; and in two days more, im-

into the p
a stranger
pierce aspe
the ground
formidable
the p

our way lon
by the
I remained
numerous
small rem
them
vicinity
that gen
and
its bu
or fifty
ed tha
actually
supposed
meat, a
are now seldom
fall, large
mounted
are well
themselves over

nerally in the open air, or
nder their provision carts.
s are perceived, the young
n, and either partially sur-
plain, or endeavour to drive
le valley, or neck of land
ce, where escape is difficult.
ı opens all along the line.
heir guns while their horses
the bullets are carried in the
d into the barrel without any
nall whips are attached by a
wrist; the sagacious horse of
ollows the animal his master
nd brings him alongside, like
herself by the enemy. In this
es in succession are shot by the
l hundreds fall in a single race.
livelier than a camp of suc-
They generally pitch in some
of woods; the provision carts
circle, to which the horses are
e in every direction; the men
pes, or arrange their fire-arms;
ıen are employed in cooking.
ı hear the laugh and the jest,
are sumptuous. While the men
ıles are occupied in drying the

mediately on emerging into the plain country, fell in with buffaloes. To a stranger, the buffalo bull, with his large hump, fierce aspect, and long beard that almost sweeps the ground, would, I think, appear the most formidable animal in America, even more so than the panther or grizzly bear.

On the 13th, after losing our way long before daylight, and finding it again by the compass, we arrived at Carlton, where I remained till the 15th. The buffaloes were so numerous about this place, that I found Mr. Small removing his haystacks to the fort, to save them from being entirely devoured. In the vicinity were three camps of Assiniboines, whom that gentleman seemed to consider disagreeable and dangerous neighbours. Each camp had its buffalo pound, into which they drove forty or fifty animals daily; and I afterwards learned that, in other places, these pounds were actually formed of piled-up carcases! As might be supposed, the stores of Carlton were groaning with meat, and the very dogs were fed on beef-steaks.

At Red River the buffaloes are now seldom taken in pounds. In the summer and fall, large parties of the half-breed hunters, all mounted on their small Indian horses, which are well broke in to this sport, scatter themselves over

the plains, camping generally in the open air, or in leather lodges, and under their provision carts. As soon as the buffaloes are perceived, the young men gallop after them, and either partially surround them on the plain, or endeavour to drive them into some little valley, or neck of land projecting into a lake, where escape is difficult. A running fire then opens all along the line. The hunters reload their guns while their horses are in full career; the bullets are carried in the mouth, and dropped into the barrel without any wadding; their small whips are attached by a band to the right wrist; the sagacious horse of his own accord follows the animal his master has singled out, and brings him alongside, like a war-ship laying herself by the enemy. In this way many buffaloes in succession are shot by the same hunter, and hundreds fall in a single race. No sight can be livelier than a camp of successful hunters. They generally pitch in some clump or point of woods; the provision carts form the outer circle, to which the horses are tied; fires blaze in every direction; the men smoke their pipes, or arrange their fire-arms; while the women are employed in cooking. Everywhere you hear the laugh and the jest, and the repasts are sumptuous. While the men hunt, the females are occupied in drying the

spare meat, or converting it into *pemican.* This now far-famed provender of the wilderness is formed by pounding the choice parts of the meat very small, putting it into bags made of the skin of the slain animal, into which a proportion* of melted fat is then poured; and the whole being strongly compressed, and sewed up, constitutes the best and most portable article of provision for the voyageur, and one which with proper care will keep for a long period.

In the winter season this sport assumes a more various character. When the snow is not deep, the buffaloes may be run on horseback, as in the summer; indeed, if numerous, they beat such a track with their broad hoofs that they are easily pursued: at other times they are approached by the hunter "crawling" on the snow. He walks cautiously up to within a certain distance, far enough not to alarm the herd; then prostrates himself on the snow; drags himself along on his belly, with his gun trailing after him; and in this manner frequently proceeds a long way before he can get within reach, when the buffaloes are shy. When fatigued with this laborious and unnatural motion, he stops to draw breath, and throws up a little heap of snow before him, to screen him

* 50lbs. pounded meat, and 40lbs. grease, make a *bag* of pemican.

from his prey; and some are said to be so dexterous in this mode of approach as actually to drive aside with their guns the old bulls, who form the outer guard of the band, in order to select the choicest of the cows. As a disguise, a close dun-coloured cap, furnished with upright ears, is often worn by the experienced hunter, to give him the appearance of a wolf; for, from constant association, that ravenous beast is regarded by the buffalo without dread. In the spring of the year, when there is a hard crust on the snow, produced by alternate thaw and frost, the buffaloes are frequently run down by the hunters, and stabbed with their daggers, while floundering in the deep drifts, which yield to their weight, but support their pursuers, who wear snow-shoes; and in this way, which is the easiest and safest of all, the unfortunate animals fall a prey even to women and boys. Among the Assiniboines, and other Plain tribes, who lead this unlaborious and almost enviable life, the bow is still more used than the gun; and it is to this circumstance that the preservation of the whites in the trading-posts on the banks of the Saskatchewan and Missouri is mainly owing.

In the New York Albion of the 23rd November, 1839, I fell in with an admirable article on the colonization of New Zealand; the follow-

ing extract from which presents, I fear, too true a picture of savage life. "We are not aware of any authentic instance of a tribe of savage fishers or hunters becoming settled and agricultural, even by any pressure from without, much less from their own unaided efforts. So far from adopting civilized habits, the experience of America and New Holland has shewn that the savage hovers on the advancing frontier of civilization, till he finally disappears along with the game which afforded him support. There appears to be something in the unsettled life of a hunter which produces a change in the bodily organization, gradually unfitting the individual, and perhaps ultimately the race, from being brought under the influence of a sedentary life. Those Europeans who have lived among the Indians of America for some years can seldom be reconciled to a steady and uniform course of life; and in Indians themselves the tendency becomes hereditary and almost incurable. Hence even the Indian child, when brought up in a populous city, and educated in the arts and religion of civilized men, often betrays his dislike to a settled life, and endeavours by all means to rejoin his wild countrymen of the woods."

For six days beyond Carlton we travelled amongst the buffaloes, which covered the open

country in myriads. Our dogs, habituated to the sight, shewed no inclination to pursue them, and we ourselves had little time to spare for hunting. On one occasion, when we were benighted in the plains near Quill Lake, we took up our quarters in a willow-bush, evacuated the moment before by an old bull and his followers, whose lair served us for an encampment. There are few sounds more melancholy than the nightly howling of the troops of wolves that attend the motions of the buffalo. The mind is oppressed, as it were, with a feeling of intense loneliness. The only Indians we met on this part of our route were a small party of Plain Crees, and two or three Saulteaux.

In the afternoon of the 22nd we reached Fort Pelly, where we were very kindly welcomed by Dr. Todd, and where we remained the following day. The weather was very cold, the thermometer being at —37°; the snow grew deeper as we advanced, and the encampments were open and bad.

I passed this time by way of Qu'appelle, instead of Manitobah, and halted on the 27th at a post called "Beaver Creek," though the beavers have long since disappeared. Arriving there late in the evening, I found that I had only missed, by an hour or two, a famous Plain chief

called "The Man who holds the Knife," with his large and troublesome gang, who in all probability would have dogged my little party had they known of our approach. We passed far to the southward of our old landmarks the Duck and Dauphin Mountains, which overlook, on this side, a varied landscape of wood and plain; crossed the southern arm of Manitobah Lake, fifteen miles wide, in a perfect tempest; and were next day met by an old Saulteaux acquaintance, "Terre Grasse," returning comfortably drunk from this settlement, with his wife and party, whose appearance struck me as squalid, and inferior to that of the tribes more remote from civilization.

On the 2nd of February I was welcomed at the White Horse Plain with unbounded hospitality by Mr. Cuthbert Grant, Warden of the Plains; and, on proceeding to Fort Garry, received the hearty congratulations of my excellent friends Chief Factors Finlayson and Ross, the former of whom had lately succeeded Mr. Christie as Governor of Red River.

APPENDIX.

LIST OF THE PLANTS

COLLECTED DURING THE

ARCTIC JOURNEY OF MESSRS. SIMPSON AND DEASE.

BY SIR W. J. HOOKER, K.H.

The collection from which the following list is made, formed by Mr. Dease amidst many privations and difficulties, possesses peculiar interest; the specimens being beautifully preserved, and arranged in three geographical groupes. — 1. The first of these collections, as we shall here enumerate them, was made between the mouth of the Coppermine River, lat. 67° 54′ N., long. 115° 31′ W., and Point Turnagain, in 1838. — 2. The second was formed about Fort Confidence, Great Bear Lake, lat. 66° 55′ N., long. 118° 48′ W.; also in the summer of 1838.—3. The third in the most western point of the journey, namely, between the mouth of the Mackenzie River and Boat Extreme, lat. 71° 3′ 24″ N., W. long. 154° 26′ 30″, in the summer of 1837.

I.—Plants collected between the mouth of the Coppermine River, lat. 67° 54′ N., long. 115° 31′ W., and Point Turnagain.

RANUNCULACEÆ.

Anemone parviflora. *Mich.—Hook. Fl. Bor. Am.**

Ranunculus aquatilis. *L.* — β. capillaceus. *D.C.—Hook. l. c.* i. p. 10.

Ranunculus affinis. *Br.—Hook. l. c.* i. p. 12.

PAPAVERACEÆ.

Papaver nudicaule. *L.—Hook. l. c.* i. p. 34.

CRUCIFERÆ.

Cardamine digitata. *Rich.—Hook. l. c.* i. p. 45.

Parrya arctica. *Br.—Hook. l. c.* i. p. 47.

Draba algida. *Adams.—Hook. l. c.* i. p. 50.

Draba hirta. *L.—Hook. l. c.* i. p. 52.

Draba alpina. *L.*—δ. *Hook. l. c.* i. p. 50. (floribus albis.)

CARYOPHYLLEÆ.

Silene acaulis. *L.—Hook. l. c.* i. p. 87.

Stellaria læta. *Rich.—Hook. l. c.* i. p. 96.

Arenaria peploides. *L.—Hook. l. c.* i. p. 102.

Cerastium alpinum. *L.—Hook. l. c.* i. p. 104.

LINEÆ.

Linum perenne. *L.—Hook. l. c.* i. p. 106. — Specimens small: from 8 to 10 inches high.

LEGUMINOSÆ.

Phaca frigida. *L.—Hook. l. c.* i. p. 140.

* As the species are all described in the author's "Flora Boreali-Americana," where synonyms and remarks are given, it has been thought sufficient to refer to that work for further information respecting them.

Phaca astragalina. *D.C.—Hook. l. c.* i. p. 145.
Oxytropis Uralensis. *D.C.—Hook. l. c.* i. p. 145.
Oxytropis campestris. *D.C.—Hook. l. c.* i. p. 147.
Hedysarum boreale. *Nutt.—Hook. l. c.* i. p. 154.
Hedysarum Mackenzii. *Rich.—Hook. l. c.* i. p. 158.
Lupinus perennis. *L.—Hook. l. c.* i. p. 163.

ROSACEÆ.

Dryas integrifolia. *Vahl,—Hook. l. c.* i. p. 174.
Potentilla nivea. *L.—Hook. l. c.* i. p. 195.
Potentilla rubricaulis. *Lehm.—Hook. l. c.* i. p. 191.
Potentilla biflora. *Lehm.—Hook. l. c.* i. p. 195.

ONAGRARIÆ.

Epilobium latifolium. *L.—Hook. l. c.* i. p. 205.

SAXIFRAGEÆ.

Saxifraga oppositifolia. *L.—Hook. l. c.* i. p. 243.
Saxifraga cæspitosa. *L.—Hook. l. c.* i. p. 244.
Saxifraga cernua. *L.—Hook. l. c.* i. p. 246.
Saxifraga punctata. *L.—Hook. l. c.* i. p. 251.
Saxifraga tricuspidata. *Retz,—Hook. l. c.* i. p. 254.
Saxifraga aizoides. *Sm.—Hook. l. c.* i. p. 255.

COMPOSITÆ.

Chrysanthemum arcticum. *L.—Hook. l. c.* i. p. 319.
Chrysanthemum integrifolium. *Rich. — Hook. l. c.* i. p. 319. TAB. cix.
Artemisia arctica. *Bess.—Hook. l. c.* i. p. 323.
Arnica montana. *L.—β. Hook. l. c.* i. p. 330.
Aster alpinus. *L.—Hook. l. c.* ii. p. 6.
Erigeron uniflorus. *L.—Hook. l. c.* ii. p. 17.

ERICEÆ.

Andromeda tetragona. *L.—Hook. l. c.* ii. p. 38.
Andromeda polifolia. *L.—Hook. l. c.* ii. p. 38.
Rhododendron Lapponicum. *L.—Hook. l. c.* ii. p. 43.
Ledum palustre. *L.—Hook. l. c.* ii. p. 44.

BORAGINEÆ.

Lithospermum maritimum. *Lehm.* — *Hook. l. c.* ii. p. 86. — A very small Arctic form of the species.

SCROPHULARINÆ.

Gymnandra Stelleri. *Cham. et Schlecht.—Hook. l. c.* ii. p. 102.
Castilleja pallida. *Kth.—Hook. l. c.* ii. p. 105.
Pedicularis capitata. *Adams.—Hook. l. c.* ii. p. 106.
Pedicularis hirsuta. *L.—Hook. l. c.* ii. p. 109.
Pedicularis Lapponica. *L.—Hook. l. c.* ii. p. 108.

PRIMULACEÆ.

Androsace septentrionalis. *L.—Hook. l. c.* ii. p. 119.

PLUMBAGINEÆ.

Statice Armeria. *L.—Hook. l. c.* ii. p. 123.

EMPETREÆ.

Empetrum nigrum. *L.—Hook. l. c.* ii. p. 140.

AMENTACEÆ.

Salix arctica. *Br.—Hook. l. c.* ii. p. 152.

GRAMINEÆ.

Bromus purgans. *L.* — *Hook. l. c.* ii. p. 252. — This is a small variety, with very deep purple spikelets.

II. — Plants collected about Fort Confidence, Great Bear Lake, lat. 66° 55′ N., long. 118° 48′ W.

RANUNCULACEÆ.

Anemone patens. *L.—Hook. l. c.* i. p. 4.
Anemone parviflora. *Mich. supra.*

CRUCIFERÆ.

Draba hirta. *L. supra.* — This solitary specimen is very large, nearly a foot high.

CARYOPHYLLEÆ.

Stellaria læta. *Rich. supra.*

HYPERICINEÆ.

Parnassia Kotzebui. *Cham. et Schlecht.—Hook. l. c.* i. p. 83.

LEGUMINOSÆ.

Phaca aboriginum. *Hook. l. c.* i. p. 143. Astragalus aboriginum. *Rich.*
Phaca astragalina. *D.C. supra.*
Oxytropis campestris. *D.C. supra.*
Hedysarum boreale. *Nutt. supra.*

ROSACEÆ.

Dryas integrifolia. *Vahl, supra.*
Rubus acaulis. *Mich.—Hook. l. c.* i. p. 182.
Rubus Chamæmorus. *L.—Hook. l. c.* i. p. 183.
Potentilla rubricaulis. *Lehm. supra.*

ONAGRARIÆ.

Epilobium palustre. *L.—Hook. l. c.* i. p. 207.

SAXIFRAGRÆ.

Chrysosplenium alternifolium. *L.*—*Hook. l. c.* i. p. 242.
Saxifraga cæspitosa. *L. supra.*
Saxifraga tricuspidata. *Retz, supra.*

COMPOSITÆ.

Arnica montana. *L. β. supra.*
Senecio lugens. *Rich.*—*Hook. l. c.* i. p. 331.
Erigeron alpinus. *L.*—*γ. Hook. l. c.* ii. p. 18.

ERICEÆ.

Andromeda tetragona. *L. supra.*
Arbutus alpina. *L.*—*Hook. l. c.* ii. p. 37.

MONOTROPEÆ.

Pyrola secunda. *L.*—*Hook. l. c.* ii. p. 45.
Pyrola rotundifolia. *L.*—*Hook. l. c.* ii. p. 47.

SCROPHULARINÆ.

Castilleja pallida. *Kth. supra.*
Pedicularis Lapponica. *L. supra.*
Pedicularis euphrasioides. *Steph.*—*Hook. l. c.* ii. p. 109.
Pedicularis Sudetica. *Willd.*—*Hook. l. c.* ii. p. 109.

PRIMULACEÆ.

Primula Sibirica. *Jacq.*—*Hook. l. c.* ii. p. 121.

PLUMBAGINEÆ.

Statice Armeria. *L. supra.*

AMENTACEÆ.

Salix reticulata. *L.*—*Hook. l. c.* ii. p. 151.

JUNCAGINEÆ.

Triglochin maritimum. *L.*—*Hook. l. c.* ii. p. 168.

CYPERACEÆ.

Eriophorum capitatum. *Host*,—*Hook. l. c.* ii. p. 231.

FILICES.

Aspidium (Lastrea) fragrans. *Sw.*—*Hook. l. c.* ii. p. 261.
Cistopteris fragilis. *Bernh.*—*Hook. l. c.* ii. p. 260.

MUSCI.

Sphagnum acutifolium. *Ehrh.* — *Rich. App. to Frankl. Journ.* p. 39.

LICHENES.

Cetraria Richardsoni. *Hook.*—*Rich. l. c.* p. 46. TAB. XXXI.

III.—Plants collected to the westward of the Mackenzie River, between that and Boat Extreme, lat. 71° 3′ 24″ N., long. 154° 26′ 30″ W.

RANUNCULACEÆ.

Ranunculus nivalis. *L.*—*Hook. l. c.* i. p. 17.
Aconitum Napellus. *L.*—*Hook. l. c.* i. p. 26.

PAPAVERACEÆ.

Papaver nudicaule. *L.*—*Hook. supra.*

CRUCIFERÆ.

Cardamine digitata. *Rich. supra.*

Parrya macrocarpa. *Br.* — *Hook. l. c.* i. p. 48. This fine species of *Parrya* never seems to pass to the eastward of the Mackenzie River.

Draba algida. *Adams. supra.*

Draba alpina. *L.*—fl. alb. *supra.*

Cochlearia Danica. *L.*—*Hook. l. c.* i. p. 57.

CARYOPHYLLEÆ.

Silene acaulis. *L.*—*Hook. l. c.* i. p. 87.

Lychnis apetala. *L.*—*Hook. l. c.* i. p. 91.

Stellaria humifusa. *Rottb.*—*Hook. l. c.* i. p. 97.

Cerastium alpinum. *L. supra.*

Arenaria arctica. *Stev.*—*Hook. l. c.* i. p. 100. TAB. XXXIV.

LEGUMINOSÆ.

Phaca frigida. *L. supra.*

Phaca astragalina. *D.C. supra.*

Oxytropis arctica. *Br.*—*Hook. l. c.* i. p. 146.

Lupinus perennis. *L. supra.*

ROSACEÆ.

Dryas integrifolia. *Vahl, supra.*

CRASSULACEÆ.

Sedum Rhodiola. *D.C.* — *Hook. l. c.* i. p. 227. These specimens, though in full flower, scarcely exceed two inches in height.

SAXIFRAGEÆ.

Saxifraga oppositifolia. *L. supra.*

Saxifraga punctata. *L. supra.*

Saxifraga Hirculus. *L.*—*Hook. l. c.* i. p. 252.

Saxifraga flagellaris. *Willd.*—*Hook. l. c.* i. 253. TAB. lxxxvii.

Saxifraga Richardsoni. *Hook. l. c.* i. p. 247. S. Nelsoniana. *Hook. et Arn. in Bot. of Beech. Voy.* p. 124. Tab. xxix. (*not of Pursh.*)

Compositæ.

Senecio palustris. β. congestus. *Hook. l. c.* i. p. 334.
Senecio frigidus. *Less.*—*Hook. l. c.* i. p. 334. Tab. cxii.

Ericeæ.

Arbutus alpina. *L. supra.*

Polemoniaceæ.

Polemonium cœruleum. *L.*—β. humile. *Hook. l. c.* ii. p. 71.

Boragineæ.

Lithospermum maritimum. *Lehm. supra.*
Myosotis alpestris. *Schmidt.*—*Hook. l. c.* ii. p. 81.

Scrophularinæ.

Gymnandra Stelleri. *Cham. et Schlecht.*—*Hook. l. c.* ii. p. 102.
Pedicularis capitata. *Adams. supra.*
Pedicularis hirsuta. *L. supra.*
Pedicularis Sudetica. *Willd. supra.*

Primulaceæ.

Primula Hornemanni. *Lehm.*—*Hook. l. c.* ii. p. 120.

Polygoneæ.

Oxyria reniformis. *Hook. l. c.*
Polygonum Bistorta. *L.*—β. elliptica. *Hook. l. c.* ii. p. 130. P. ellipticum. *Willd. Herb.*—P. bistortoides. *Pursh.*

Amentaceæ.

Salix arctica. *Br. supra.*

Salix reticulata. *L. supra.*

Salix nivalis. *Hook. l. c.* ii. p. 152. This was discovered in the Rocky Mountains by Mr. Drummond during Sir John Franklin's journey: and it is the only plant, of the above lists, which was not detected on the same Arctic shores by Dr. Richardson during his and Sir John Franklin's overland journey.

TABLE OF THE MAGNETIC VARIATION AND DIP

OBSERVED BY MR. SIMPSON.

Lat. N.	Long. W.	Variation.	Dip.	Place of Observation.
° ′	° ′	° ′	° ′	
51 45	102 5	17 0 E.		Fort Pelly.
58 43	111 18	26 6 „		Fort Chipewyan.
61 11	113 45	37 16 „		Fort Resolution.
61 51	121 25	37 10 „		Fort Simpson.
66 16	128 31	44 12 „		Fort Good Hope.
68 54	136 21	49 22 „		Shoal-water Bay.
69 18	138 8	49 0 „		Point Kay.
69 41	141 0	48 23 „		Point Demarcation.
70 10	147 30	45 0 „		Point Anxiety.
70 43	152 14	43 8 „		Point Comfort.
71 2	154 23	42 36 „		Boat Extreme.
67 11	117 5	49 30 „		Kendall River.
67 7	116 21	48 0 „		Mouth of Kendall River.
66 54	118 49	48 30 „	84 48	Fort Confidence.
67 43	115 50	54 17 „		Bloody Fall.
68 48	115 31	53 48 „		Mouth of Coppermine River.
68 16	109 21	46 0 „		Boathaven.
68 52	106 20	63 0 „		Trap Cape.
68 44	106 3	60 38 „		Simpson's furthest, 1838.
67 54	115 56	52 10 „		Mouth of Richardson's River.
68 4	110 59		87 13	Cape Barrow.
68 56	106 40		88 15	Cape Alexander.
68 7	103 37	54 45 E.	88 20	White-bear Point.
68 21	97 25		89 30	Thunder Cove.
68 4	95 41	1to1½p^{ts}.E.	No var.	Cape Britannia.
68 28	94 14	16 20 W.		Castor and Pollux River.
68 41	98 22	4pts. E.	89 29	Cape Herschel.

LONDON:
Printed by S. & J. Bentley, Wilson, and Fley,
Bangor House, Shoe Lane.